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The University of Southern Mississippi

CHANGE CAPACITY AS A DETERMINANT OF
SUSTAINABLE ROI IMPLEMENTATION IN
HUMAN RESOURCE DEVELOPMENT PRACTICE

by

Hollis Jo Ann Burkett

Abstract of a Dissertation
Submitted to the Graduate School
of The University of Southern Mississippi
in Partial Fulfillment of the Requirements
for the Degree of Doctor of Philosophy

August 2010

ABSTRACT

CHANGE CAPACITY AS A DETERMINANT OF
SUSTAINABLE ROI IMPLEMENTATION IN
HUMAN RESOURCE DEVELOPMENT PRACTICE

by Hollis Jo Ann Burkett

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The demand for accountability through measurement continues to heighten application and use of the ROI (return-on-investment) Methodology™ as an essential part of human resource development (HRD) and program evaluation in both private and public sector organizations. Although progress has been made towards identifying best practices in ROI process implementation, sustainability of the process is an aspect of implementation that is often overlooked and under-estimated.

This research identifies characteristics of sustainable ROI process implementation in HRD practice and offers a framework for ROI process maturity, along with practical guidelines to enhance evaluation process and practice maturity. The target population was drawn from public and private sector organizations in the U.S. that have offered ROI Methodology™ training to its employees and included HRD professionals who have had experience implementing the ROI Methodology™ and who have achieved, or who are in the process of achieving, ROI certification.

A sequential, mixed methods research design was used to test and address four research objectives. Statistical analysis conducted during phase one showed a highly significant positive relationship between the degree of sustainable ROI process implementation and the degree in which a planned change process is applied to ROI

process implementation. Statistical analysis also supports existing research that describes change capacity as a determinant of a sustainable, results-based evaluation system.

Qualitative findings identified key themes related to enablers and barriers to implementation success and confirmed existing research about characteristics of a sustainable measurement and evaluation system, including: committed leadership; dedicated resources; internal support; contextualized implementation planning; business alignment; and individual and organizational change capacity and change readiness.

Quantitative and qualitative research findings were linked during data collection and analysis and qualitative findings were used to expand upon interpretations and conclusions drawn from quantitative results to present a more comprehensive picture of sustainability issues. There was consistent agreement among groups about themes, factors, and characteristics of sustainability, including implementation success factors and implementation barriers. However, some differences emerged around the degree to which participating organizations have been able to sustain success factors and counter implementation barriers. Findings unique to this research show that the business context in which the ROI process is embedded is typically volatile and that organizational change patterns can impede successful implementation if not properly addressed. Other unique findings suggest that a multiplier effect takes place as the ROI Methodology™ becomes more embedded in an organization. In other words, the greater the operational maturity of the ROI Methodology™, the greater the multiplier effect of value creation as an outcome of sustainable ROI implementation. Implications for evaluation practice are provided, along with recommendations for future research.

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DEDICATION

This work is dedicated to my father, Sgt. Major “Buck” Burkett, USMC, who taught me anything is possible when you use your head, follow your heart, and remain loyal, principled, and patient. This is also dedicated to my grandfather, Joe, who sacrificed his own hopes and dreams to help make my academic dreams come true. In your honor and in gratitude to you both, this is a good day.

ACKNOWLEDGMENTS

Without order nothing can exist - Without chaos nothing can evolve

This work represents a journey that was equal parts order and chaos. Achieving order from the chaos, so that the final study could exist and evolve, would not have been possible without the continuous support, direction, counsel, and generous infusion of time and energy provided by my dissertation committee. Dr. Cyndi Gaudet, as my dissertation chair, helped steer the course and kept a steady hand on navigating me through the morass of details, deadlines, and ubiquitous University requirements that were a mystery to me as both a doctoral candidate and an out-of-state student. I was fortunate to be introduced to the Human Capital Development program by Dr. Gaudet and her contagious enthusiasm and commitment to the program fueled my interest and motivation to be a part of this innovative endeavor on the Gulf Coast. Dr. Patti Phillips has long been a source of inspiration on both a professional and personal level. I am perpetually humbled and grateful for her support, her enduring faith in my abilities, and for the invaluable privilege of being able to count her as a mentor, colleague, Boot Camp Director, and friend. Special thanks go to Dr. Deborah Wharff, who contributed her own unique spirit of affirmation, faith, and cheerleading to the cause and continues to show by example, what it means to be best-in-class. Dr. Mary Nell McNeese guided me through many hoops in statistical analysis and remained patient and encouraging throughout the process. Dr. Heather Annulis and Dr. Brian Richard were faculty members who significantly enriched my academic journey and stimulated my learning.

Much gratitude goes to Dr. Jack Phillips, who was generous enough to offer his counsel, considerable wisdom, and Boot Camp support throughout various phases of the

study. His enduring and ongoing contributions to the field of measurement and evaluation provide a legacy of work that has transformed my career path, electrified my commitment to the field, and has continued to leave me hungry for more. It is my hope that this research will, in some small way, contribute to the body of knowledge about ROI implementation and best practices and give back to those thought leaders (like Jack and Patti Phillips) who have paved the evaluation trail before us. Elaine Graves, from the ROI Institute, also deserves special thanks for her assistance in coordinating pre-notice letters and distribution of book incentives to survey participants.

Given that this research focuses on the topic of sustainability, sustaining momentum for this study would not have been possible without the support of many friends, colleagues, and family members who tolerated my highs and lows during the long haul of this effort. Sincere appreciation to my cadre of Peer Reviewers and external auditors: Caroline Hubble, Pat Lynch, Kim Green, Toni DeTuncq, Dan McLinden, Claudia Barnett, Lynn Schmidt, and especially John Kmiec, were all kind enough to lend an ear and a hand to support this research. A big shout out goes to Suzy Robinson and Robin Johnson of USM, who provided infectious optimism and beacons of light from the very beginning stages of this effort. Much appreciation goes to my friend Varda, who repeatedly loaned her office space as a sanctuary for me to regroup and recharge my batteries. Special thanks also to my husband, Bob, who endured many bouts of dissertation mania and dissertation blues and who spurred me on in countless ways. All these individuals nourished my mind, soul, and spirit in some way throughout this process. But I would be remiss without also acknowledging the Blow Fly Inn and the Long Beach Crawfish Hut for also nourishing my body with ample helpings of fried

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CHAPTER I

INTRODUCTION

Background

Human resource development (HRD), as a discipline, has its roots in apprenticeship agreements dating back to colonial times. Specifically, “skills-employability” programs were a pre-industrial paradigm employed by colonies in order to care for orphans, poor children and delinquents by indenturing them to serve an apprenticeship. The reduced emphasis on apprenticeship models as a major form of workforce education occurred after the industrialization era in the 19th century, when the focus of education and training shifted from the individual towards training supported directly by employers or employee groups (Miller, 1996; Nadler & Nadler, 1994).

The impact of the two World Wars significantly influenced the beginning and evolution of private sector training and human resource development. Specifically, unprecedented labor demands due to drafting of workers and the shortage of skilled workers -- particularly at the first-line supervisory level -- led to increased pressures for “training-within-industry” and specialized training for executive development and other professional ranks, such as engineers and salespersons. As training and HRD gained prominence as a profession, workforce training content and methods (such as needs assessment and competency-based instruction) became more specialized and communities of practice like the American Society of Training Directors (now ASTD), the National Society for Programmed Instruction (now the International Society for Performance Improvement, ISPI), and the organizational development (OD) community emerged to promote workforce development models (Miller, 1996).

One of the most prevalent models that grew from the professionalism of HRD is the ADDIE (Analysis, Design, Development, Implementation, and Evaluation) model, which serves as an instructional systems design (ISD) model for training, HRD, and performance improvement professionals. The ADDIE model provides a step-by-step process for structured course development that begins with front-end analysis and ends with evaluation. Figure 1.1 illustrates the five steps of the ADDIE model (Waagen, 1998).

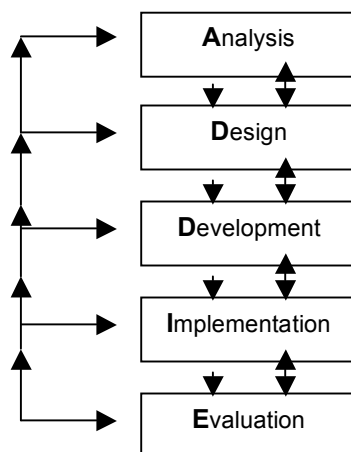


Figure 1.1. The ADDIE Model of Instructional Systems Design (ISD). Illustrates a step-by-step process and feedback loop for structured course development.

Note: From "Task Analysis: Instructional Systems Development," by A. Waagen, 1998, Issue # 9808, pp. 57-71.

Emphasis on evaluation has continued to evolve and is now viewed in a much broader context than simply after-the-fact assessments of programs, policies, or projects. In 1976, two US-based evaluation associations were formed, which consisted mostly of university professors and government-based evaluators, respectively. These two associations, the Evaluation Research Society and Evaluation Network, merged to become the American Evaluation Association (AEA) in 1985. Membership now includes

approximately 5,000 individuals from all 50 states and over 60 countries around the world. National associations of evaluation professionals are well established and include, but are not limited to, the African Evaluation Association, the Canadian Evaluation Society, the European Evaluation Society, the Japan Evaluation Society, and the United Kingdom Evaluation Society. Two global networks -- the International Development Evaluation Association (IDEAS) established in 2002 and the International Organization for Cooperation and Evaluation (IOCE) launched in 2004 -- are committed to helping these associations with networking, applying innovative methodological approaches, knowledge sharing, and capacity building (Bamberger, Rugh, & Mabry, 2006; Preskill & Russ-Eft, 2005).

In the U.S., the reliance on a skilled and capable workforce continues to place increased emphasis on human capital development as a capacity-building advantage (Carter et al., 2004; Ulrich, 1997), particularly in the face of rapidly advancing technology, ever-changing economic landscapes, global competition, and shifting demographics. In the past, the success of human capital investments was measured by activity: number of people involved, money spent, and days to complete. Little consideration was given to the benefits derived from these activities. But as the cost of human resource development solutions continues to escalate, the budgets for these initiatives become targets for others who would like to divert the money for their own projects. For example, the 2008 ASTD State of the Industry Report estimates that U.S. organizations spent \$134.39 billion on employee learning and development activities in 2007. With escalating HRD costs and diminishing resources, shareholders and CFO's are demanding new evidence that monetary resources are put to best use and that investments

are allocated to programs, processes, and projects that yield the greatest return (Callahan & Kolby, 2009; Phillips & Phillips, 2010).

The demand for results-based measures of effectiveness, up to and including return on investment, has steadily increased in both the public and private sector. In 1993, Congress passed the Government Performance and Results Act (GPRA), which required all federal agencies to set up and report outcome-based strategic and annual goals (Walters & Thompson, 2005). The Obama administration has expanded the goals of the GPRA to advance its agenda and improve the impact and productivity of federal agencies. Specifically, the current administration is holding programs more accountable for their performance and has called for:

...a focused team within the White House that will work with agency leaders and the White House Office of Management and Budget (OMB) to improve results and outcomes for federal government programs while eliminating waste and inefficiency. This unit...will be...headed by a new Chief Performance Officer (CPO) who will report directly to the President (Castelli, 2008).

With these new standards, federal agencies will now be required to establish a comprehensive measurement system to link programs with agency and government-wide performance goals, reform program assessments, and show that performance goals and measures are used, not just produced. Expectations for the public reporting of data also means there will be continuous measurement and reporting of performance, something that was lacking under previous policies and programs, where years went between assessments, if they were reassessed at all, meaning data used to gauge programs was out of date (Metzenbaum, 2008).

Collectively, these trends have heightened interest in ROI (return-on-investment) as an essential part of workplace learning, human resource development, and program evaluation in both private and public sector organizations. While the concept of ROI is not new, it has only been in recent years that the application of the concept has been expanded to all types of investments including training and education, change initiatives, and technology (Phillips, 1997b). Benchmarking studies show it is a fast growing metric – 70-80% of organizations have it on their wish list (Phillips, 2007b). A recent survey of Fortune 500 CEO's reports that 96% want impact measures and 74% want ROI measures of HRD effectiveness. However, only 8% report that they receive impact data and only 4% report seeing ROI data from the HRD function (Phillips & Phillips, 2010).

Providing impact data and determining the return on investment of training and HRD investments begins with an evaluation framework. The balanced scorecard process (Kaplan & Norton, 1996) or the four levels of evaluation developed by Kirkpatrick (1975) provide beginning perspectives on such a framework. Kirkpatrick, in particular, is recognized as a major contributor to the field of training evaluation. His series of articles featured in the *Journal of ASTD* from 1959 to 1960, were reprinted in another *ASTD* publication "Evaluating Training Programs" (Kirkpatrick, 1975). These articles present a variation of Katzell's (1956) four-step measurement approach (Smith, 2008), which ultimately became known as the four "levels" of evaluation (Kirkpatrick, 1998), as shown in Table 1.1.

Table 1.1

Kirkpatrick Four Level Framework

Levels of Evaluation	Brief Description
1. Reaction	Measures participants' reaction to the program
2. Learning	Measures participants' learning from the program
3. Job Behavior	Measures changes in participants' job behavior as a result of the program
4. Results	Measures achievement of business results as a result of the program

Note: Adapted from "Kirkpatrick Four Level Framework" by J.J Phillips, P. Phillips, R. Stone, & H. Burkett, 2006, *The ROI Fieldbook: Strategies for Implementing ROI in HR and Training*, p. 9.

The Kirkpatrick framework is frequently portrayed as incomplete by some training evaluators, scholars, researchers, and practitioners. For instance, Holton (1996) contends that the causal linkages between the levels are weak and that the four level work does not add to the body of evaluation research because it is more representative of a taxonomy than a theoretical model.

However, researchers Warr and Bunce (1995) found a strong association to exist between learning and job performance (Levels 2 and 3) levels. Warr, Allan, and Birdi (1999) also found strong associations between reaction measures (Level 1) to transfer and learning (Level 2). In other research, the associations between reaction (Level 1) and job behavior (Level 3) and between learning outcomes (Level 2) and job behavior (Level 3) were found to be weaker. Associations between reaction (Level 1) and results (Level 4) and behavior (Levels 3) and results (Level 4) were also found to be weak

(Bledsoe, 1999). There is some speculation that the lack of strong linkage between the levels may be an indication that the levels are not necessarily designed or utilized to address similar aspects (Allinger & Tannenbaum, 1997) and that the intent of reporting results at four levels was not to report on relationships, but rather to report on specific elements of program success.

Phillips (1995) expanded upon Kirkpatrick's four level framework to incorporate a fifth level of evaluation - return-on-investment (ROI) - for capturing the financial impact of workplace learning and development programs. The five level evaluation framework is shown in Table 1.2.

Table 1.2

Phillips' Five Level Framework

Levels of Evaluation	Brief Description
1 Reaction and Satisfaction	Measures participants' reaction to the program or solution and stakeholder satisfaction with the program and the planned implementation
2 Learning	Measures skills, knowledge, or attitude changes related to the program and implementation
3 Application	Measures changes in behavior on the- job and specific application and implementation of the program
4 Impact	Measures changes in impact variables related to the program
5 Return on Investment	Compares the monetary value of the business impact with the costs of the program

Note: From "Corporate Training: Does it Pay Off?" by J. J. Phillips, 1995, *William and Mary Business Review*, Summer, pp. 6-10. Used with permission.

Along with adding the fifth level, which represents economic impact, Phillips developed a process model and standards to ensure consistent application of appropriate research methods as HRD professionals collect and analyze evaluation data. This approach, the ROI Methodology™, generates six types of results. These results are categorized along the five levels and include a sixth type of data—not a sixth level—intangible benefits. Intangible benefits are those benefits that are not converted to money but nonetheless constitute important measures of success. Intangible benefits may include items such as: increased job satisfaction; increased organizational commitment; improved teamwork; improved customer service; fewer complaints; and reduced conflict (Phillips, 1997a, 1997b; Phillips, 1995)

Based on over 20 years research, the ROI Methodology™ presents a comprehensive, evidence-based evaluation process that integrates a variety of methodologies practitioners can use to collect data, isolate the effects of a program, convert data to monetary value, and identify intangible benefits. While there are various approaches to evaluating the business value of workplace learning programs, the ROI Methodology™ is one of the most credible and widely used evaluation systems used by private and public sector companies around the world. For instance, over 4,000 organizations in 52 countries have formally implemented the ROI process in accordance with training provided from Phillips' ROI Institute and almost 2,500 individuals have been certified to implement the process within their organizations. Ninety-two percent of the Top 100 companies reportedly measure performance effectiveness through Phillips' ROI Methodology™ (Phillips & Schmidt, 2004). Five casebooks have been developed to

show specific applications of ROI (Phillips, 1997b). A fourth casebook describes successful implementation of the ROI process (Phillips, 1998; Phillips & Phillips, 2007a).

Despite prevalent use of the ROI Methodology™ in HRD practice, it is not without its share of debate or detractors. Some question its appropriateness, accuracy, and necessity (Bates, 2004). Others (Spitzer & Conway, 2002) contend that the framework is more conceptual than technical and lacks tools to enhance business results or to link application (Level 3) to impact (Level 4). Some researchers challenge the isolation techniques provided by the ROI process model and argue that the isolation issue should be ignored unless a control group is utilized (Spitzer & Conway, 2002).

However, accounting for other factors that have influenced output variables is one of the most often overlooked and challenging issues in program evaluation. The ROI process model provides techniques for pinpointing the contribution of the program when compared to other influences, which is a necessary component for building credibility among stakeholders (Hodges, 2002; Phillips & Aaron, 2008). In addition, the ROI process model emphasizes the use of credible assumptions, consistent operating standards, and conservative methods that strike a balance between maintaining a practical, flexible approach *and* a sound and theoretical basis for evaluation practice that is appropriate with a variety of initiatives.

With increased prevalence and application of the ROI Methodology™, much of the focus has now turned to best practices for implementation (Burkett, 2004; Phillips & Phillips, 2007a; Wallace, 2001). Although progress has been made, ROI process implementation represents a significant undertaking that requires careful planning and a disciplined approach to keep the process on track. Implementation

schedules, evaluation targets, data collection plans, ROI analysis plans, measurement and evaluation policies, follow-up schedules, and resource commitments are key. However, thorough implementation planning, alone, does not guarantee successful integration of the ROI Methodology™ (Burkett, 2005b; Phillips et al., 2006; Phillips & Phillips, 2007b; Wallace, 2001).

Successful integration means that the comprehensive, evidence-based evaluation processes inherent in the ROI Methodology™ extend beyond the life-cycle of the summative and confirmative results obtained from one or more impact studies. It means that the results-based process model, with its consistent operating standards and conservative evaluation methods, is fully endorsed and integrated by the individuals, processes, and organizational structures that must make it work. Integration also means that application of the ROI process model must be continually reviewed and renewed so that it remains relevant, credible, flexible, and responsive to the changing needs of its users over time (Phillips et al., 2006; Phillips & Tush, 2008). To that end, ROI project leaders must also continually: a) assess the capabilities and capacities of those who will both produce and use the information and, b) understand the environmental constraints that might threaten resource availability or utilization of the ROI process Methodology™ as a performance improvement resource (Bell & Morse, 2001; Henriques, 2004; Isakkson & Hallencreutz, 2008; Kusek & Rist, 2004; Phillips & Tush, 2008; Wallace, 2001).

Implementation and sustainability go hand in hand – a results-based measurement and evaluation system that has no utility will not be sustained. In this context, a sustainable system is based upon the idea of institutional and functional durability and, as such, requires an implementation focus that regards building and sustaining a result-based

measurement system as a long-term versus an episodic process (Burkett, 2004; Cloete, 2005; Kusek & Rist, 2004; Phillips et al., 2006; Phillips, 2007a). Research shows, however, that most organizations plan for implementation with a short-term, activity-based focus and neglect to plan for long-term, holistic integration with a change process focus (Anderson & Anderson, 2001; Worthen, Sanders, & Fitzpatrick, 2003).

In summary, sustainable ROI implementation refers to a) the availability of organizational resources to provide, maintain, and improve results-based measurement services and b) the overall capacity of the organization to deliver such services and adapt to changing circumstances in the face of setbacks, including political challenges, resource constraints, increased competition for resources, or continuous changes in the internal or external environment. While there has been progress in use of the ROI Methodology™ as a performance improvement tool, research indicates that many organizations implement results-based measurement activities that are event-based versus systemic-based and as such, have yet to create the processes, tools, and organizational capabilities needed to successfully sustain a results-based evaluation system like the ROI Methodology™ (Bamberger et al., 2006; Burkett, 2004; Cloete, 2005; Kusek & Rist, 2004; Phillips, 1998).

Conceptual Underpinnings for the Study

This research integrated theoretical constructs from organizational development, organizational change theory, and evaluation theory. HRD theory forms the conceptual underpinnings of training evaluation theory. The major components of HRD theory include: psychological theory; economic theory; and systems theory (Holton & Swanson, 2006).

Psychological theory encompasses the broad-based realm of behavioral, cognitive, developmental, humanistic, personality, and social psychology theories. These theories provide a framework for explaining conditions that stimulate human growth, development, attitudes, and critical thinking skills (French & Bell, 1995).

Economic theory provides a theoretical foundation for the perspective of human resources as a capital asset. Human capital theory suggests that investment in human resources is essential to a high performance organization (Becker, 1994). Economic theory is also the foundation for calculating the economic value of human resource investments through an evaluation process like the ROI Methodology™. Indicators of economic value include cost, cost-effectiveness, benefit/cost ratio, and return-on-investment. In addition, there are economic dimensions to the concept of sustainability since human resources are finite and must be economically conserved for durability and access over time. Economic indicators of sustainability, in an organizational context, include corporate governance, risk and crisis management, and codes of conduct/compliance (Dow Jones Sustainability Index, 2006).

Systems theory is an interdisciplinary field of science that examines the characteristics of complex systems in nature, society, and science. More specifically, it studies the relations between the parts of the system which connect them to the whole and emphasizes that real systems are open to, and interact with, their environments (i.e. holism). Systems concepts include: system-environment boundary, input, output, process, state, hierarchy, goal-directedness, and information (Broad, 2008; Broad & Burkett, 2007; Carleton & Stevens, 2004; French & Bell, 1995; Langdon, 1992; Von Bertalanffy, 1995).

Organizational development (OD) theory is a subcomponent of systems theory. As a unique “organizational process for improving organizational processes” (Vaill, 1995), it is a planned, systemic process in which behavioral science principles and practices are introduced into ongoing organizations with the goal of increasing organizational and individual effectiveness. The focus is on organizations and helping them function better, as in *total system change*. The theory and practice of organizational development is also about getting individuals, teams, and organizations to function better through *planned change*. The system is the target of change; individuals are the instruments of change (Cameron & Green, 2004; French & Bell, 1995; Mayeno, 2007).

Organization change theory posits that the nature of change is an important factor to assess in that each type of change requires different planning actions and tactics from leaders and practitioners. Within an organizational context, change can be planned (deliberate) or unplanned (accidental). Types of change, in a general sense, include developmental change (improving skills, processes), transitional change (putting new designs in place), and transformational change. Transformational change involves a fundamental shift from one “old” state to another “new” (transformed) state. Transformational change is broad in scope, evolutionary in nature, and requires a multi-dimensional, integrated, process-oriented strategy because changing one element of an organizational structure, process, or culture requires changes in other organizational structures, processes, or cultures for institutionalization or “freezing” of change to occur. Characterized as largely unpredictable and messy, transformational change demands change readiness and continuous adaptability from both the organizational system and its individual members (Anderson & Anderson, 2001; Appleby & Tempest, 2006;

Armenakis et al., 1993; Cameron & Green, 2004; French & Bell, 1995; Lewin, 1951; Nadler & Tushman, 1997).

This research ascribes to sustainability of the ROI Methodology™ as a transformational and continuous change process. While there are occasions in which the ROI process model can be implemented to support developmental or transitional business needs, the issue of integrating and sustaining and a comprehensive measurement and evaluation process represents a “full scope” (Dessinger & Moseley, 2006), systemic focus on planned change for the purpose of improving organizational, individual, and team effectiveness (Appleby & Tempest, 2006; Burkett, 2004; Isaksson & Hallencreutz, 2008; Metzenbaum, 2008; Phillips et al., 2006; Walters & Thompson, 2005).

Evaluation research supports the concept of sustainable ROI process implementation as a cultural and complex change process because it a) requires practitioners to conceive broad-based, new methods of data collection, data analysis, data retrieval, and data reporting, among other duties, and b) introduces evaluation procedures, routines, processes, or systems that require increased organizational accountability and transparency with respect to performance results. For these reasons, sustainable implementation of a results based measurement and evaluation system has been described as a politically charged process entailing both political risks and benefits (Kusek & Rist, 2004). Evaluation research supports the concept that too little emphasis has been placed on assessing the environmental, political, and cultural contexts in which the measurement and evaluation system is meant to function (Bamberger, et al., 2006; Hailey & Balogun, 2002; Rouiller & Goldstein, 1993). This study attempts to address these gaps.

Readiness of an organization and its employees is identified in the literature as another key variable influencing an organization's pattern of change response and adaptability. Organizational members' beliefs, attitudes, and intentions regarding the extent to which changes are needed and the organization's capacity to successfully make those changes effect change readiness (Adams et al., 1976; Anderson & Anderson, 2001; Cameron & Green, 2004; Herold & Fedor, 2008). The concept of change readiness has its theoretical roots in social exchange theory. Social exchange theory, also known as a relationship maintenance theory, provides a conceptual framework for understanding relationships between individuals and their work organization (Thibault & Kelley, 1952). Social exchange theory suggests that as employees perceive greater support from the organization, their willingness to engage in and commit to a new initiative grows. This is consistent with other change research conducted by Mourier and Smith (2001) and Herold, Fedor, and Caldwell (2007), in which employees' needs for fair treatment, clear expectations, and role clarity were identified as significant factors influencing change success.

The psychodynamic impact of introducing and implementing a change process is supported by Noer's (1993) research, which contends that most leaders focus on the technical, task aspects of "getting the process right" when implementing a change project and tend to minimize or ignore the human resource aspect of individuals' impact concerns relative to the change effort (Appleby & Tempest, 2006; Herold & Fedor, 2008; Kotter, 1996; Noer, 1993).

Noer's concepts are consistent with existing evaluation studies showing that leaders responsible for implementing and sustaining the ROI Methodology™ often

overlook individual change responses and emotional impact issues (Phillips et al., 2006). Specific change responses and emotional concerns associated with implementing and embedding the ROI Methodology™ include: fear of accountability; fear about learning new evaluation techniques; and fear of consequences about how performance data will be used, among others (Phillips et al., 2006; Phillips & Phillips, 2007a; Preskill & Russ-Eft, 2005). Schein's (1990) change theory supports the concept of "learning anxiety" as a typical response to change pressure. Learning anxiety can be reduced if a) individual members (managers and staff) know in detail what they are expected to do and how they are expected to perform, and b) managers acknowledge that learning something new usually involves a temporary dip in performance. This finding has proven true and common to all types of change efforts (reengineering, process improvement, restructuring) across all industries (Mourier & Smith, 2001).

Similarly, Kusek and Rist (2004) identified six critical components of sustainability with respect to a results-based measurement and evaluation system. These include: demand; incentives; clear roles and responsibilities; trustworthy and credible information; accountability; and capacity. Phillips' research (1997b) has identified positive (enablers) and negative (barriers) factors associated with successful ROI implementation that mirror themes examined by researchers Mourier & Smith (2001), Kusek & Rist (2004), Schein (1990), and others. Specifically, these include critical success factors like credible, visible leadership, stakeholder support, appropriate resource allocation, clear roles and responsibilities, performance support, individual and organizational capacity, alignment (congruence) with business strategy, and change

readiness, among others (Bell & Morse, 2001; Burkett, 2005a; Hailey & Balogun, 2002; Phillips & Ekeles, 2007; Phillips et al., 2006; Phillips & Phillips, 2007b).

In summary, this study tests findings from existing studies regarding the applied use of the ROI Methodology™ and draws upon previous research conducted on results-based measurement and evaluation systems, planned organizational change, evaluation capacity building, and sustainability of change efforts in order to determine the characteristics associated with sustainable ROI process implementation. Following the conceptual framework shown in Figure 1.2, known factors related to an effective change process and implementation success are represented as independent variables with sustainable ROI implementation as the dependent variable.

Independent variables are grouped into composite clusters representing dimensions of change capacity identified in the literature. These clusters include:

1. Context (culture, leadership, incentives, change history, change perspective, change turbulence, congruence of change effort with culture, risk tolerance)
2. Capacity (energy, readiness, capability, attitudes, perceptions, motivation, beliefs)
3. Capability (aptitude, skills, knowledge, attributes, resources)
4. Change Process (change process methodology, content, contextual analysis, and process)

These will be used to predict the dependent variable, which is degree of sustainability with the ROI Methodology™.

This conceptual framework suggests that if a) organizations perceive ROI implementation as a relevant means to inform investment decisions, increase strategic alignment of HRD services, and improve performance outcomes; b) leaders appropriately

assess the environmental, political, and cultural contexts in which the measurement and evaluation system is meant to function; c) project teams develop systemic, holistic implementation plans with a long-term versus an episodic view; d) project leaders integrate a planned change process into implementation planning and practice; and e) executives and stakeholders maintain focus and commitment to implementing and integrating the Methodology™ in the face of competing demands for time and resources, then the overall capacity of the organization to develop, deploy, and sustain a credible, flexible, results-based measurement system, that adds and creates value and is responsive to changing needs and complex environmental conditions, will increase.

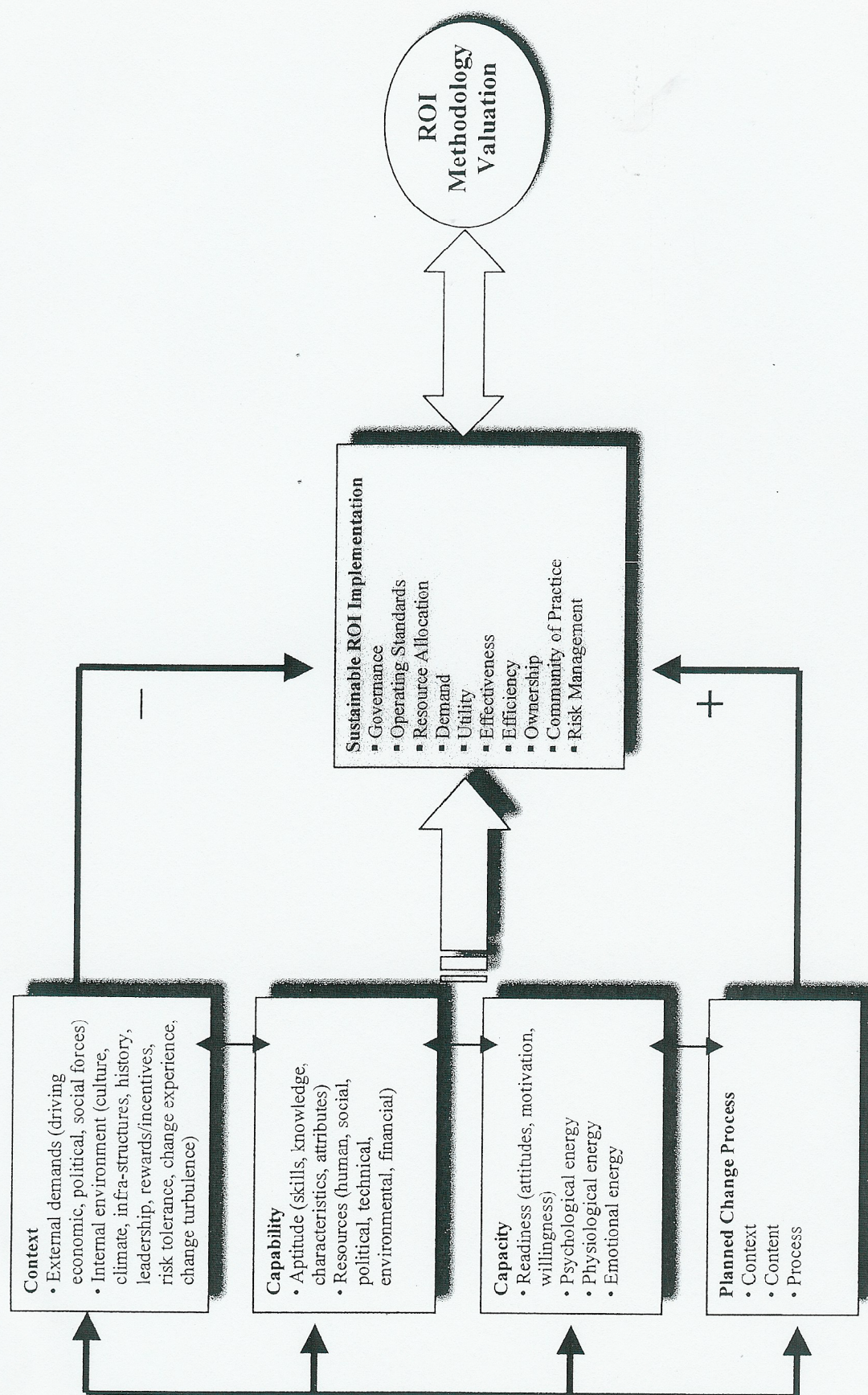


Figure 1.2. Four categories representing independent variables used to predict sustainable ROI implementation.

Statement of the Problem

The demand for results-based measures of HRD effectiveness, up to and including ROI, has steadily increased in both the public and private sector. Today, a new generation of decision makers, consumers, participants, taxpayers, stakeholders, and shareholders are demanding evidence that monetary resources are put to best use and that investments are allocated to programs, processes, and projects that yield the greatest return and value (Bamberger et al, 2006; Phillips & Phillips, 2010). Although much progress has been made, implementing the ROI Methodology™ represents a complex undertaking that requires fundamental, “politically-charged” changes to policies, processes, and programs across all organizational levels (Bamberger et al., 2006; Kusek & Rist, 2004; Phillips, 1998).

While research shows that there are common elements that lead to successful implementation of a comprehensive, results-based measurement and evaluation (M & E) system like the ROI Methodology™, sustaining the process and keeping it on track is an aspect of implementation that is often overlooked and under-estimated (Phillips et al., 2006; Phillips & Tush, 2008; Phillips & Phillips, 2007b). Evaluation research supports the concept that too little emphasis has been placed on assessing the organizational, political, and cultural contexts in which the measurement and evaluation system is meant to function (Bamberger et al., 2006; Hailey & Balogun, 2002; Rouiller & Goldstein, 1993). Organizations that pursue ROI process implementation without full assessment of the dynamic interplay between content, context, players, and other confounding change factors, will risk a decline in productivity, a reduction in employee engagement and organizational commitment, and a decrease in profitability (Herold et al., 2007;

Sobkowiak & LeBleau, 1996). These risks will increase exponentially as the environment in which the ROI Methodology™ is to be embedded becomes more turbulent (Anderson & Anderson, 2001; Herold & Fedor, 2008).

To that end, change capacity is considered a determinant of an organization's ability to successfully implement a sustainable, results-based evaluation system (Anderson & Anderson, 2001; Bamberger et al., 2006; Kusek & Rist, 2004; Herold & Fedor, 2008). New research also suggests that the ability to manage change effectively is one of the biggest factors determining whether an organization delivers sound financial and strategic performance (Amble, 2010). Change management capacity and capability vary greatly from one organization to another. Even organizations that experience constant change do not necessarily have this as a core competency.

While there is no shortage of literature about how to develop change capacity, attending to change issues remains an elusive leadership practice. To illustrate, a recent survey (Van Slyke, 2009) showed that only 3% of change managers currently believe change management is sufficiently recognized and funded. In the same survey, 83% said they worked for an organization with no change strategy in place. A 2005 Business Week report (Herold & Fedor, 2008) cites mismanagement of change as the number one factor in the firing of 31 % of CEO's. Research shows that leaders and followers agree that a leaders' capacity to assess change progress during implementation, and to sustain efforts post-implementation, is a prevalent area of limitation that impedes change success and exhausts critical resources (Herold & Fedor, 2008).

While there is no best way to sustain a comprehensive measurement system like the ROI Methodology™ in the face of omnipresent change, recognition of the change

issues associated with sustainable implementation can help organizations target interventions and allocate resources to those leverage points that will have the greatest influence on its change adaptability and utility. Effective adaptability and utilization of the ROI Methodology™ ensures that decision makers will have a durable, credible process for helping to focus on HRD programs that provide the most value returned for resources invested. There is currently no framework that can be used to help leaders describe, predict, and or manage the change and/or contextual factors that enable or inhibit sustainable development and deployment of the ROI process model.

Purpose of Study

The purpose of this research is to examine the characteristics associated with sustainable implementation of the ROI Methodology™ as a specific results-based evaluation model. The research builds upon existing studies regarding the applied use of the ROI Methodology™ and draws upon previous research conducted on results-based measurement and evaluation systems, planned organizational change, evaluation capacity building, and sustainability of change efforts. Specifically, the research seeks to further evaluation theory and practice by exploring the association between sustainable ROI implementation and a change process perspective and change process practices .

Research Objectives

Based on the current literature and research regarding successful change implementation and evaluation capacity building, the following research objectives were tested by linking quantitative and qualitative data collection and analysis:

O₁: Compare the association of sustainable ROI process implementation and the associated degree in which a planned change process is applied to implementation.

O₂: Compare the impact of Context, Capacity, Capability, and Change Process factors upon the degree of ROI Methodology™ sustainability.

O₃: Describe the characteristics of sustainable ROI process implementation

O₄ Compare the association of sustainable ROI process implementation and the number of barriers associated with implementation.

Limitations, Assumptions, and Design Controls

There are a number of limitations to the study, the first of which are related to the sample size and selection process. The selection of individuals surveyed and interviewed were part of the ROI Institute database, which may have influenced responses about the factors effecting sustainable implementation of the ROI Methodology™. Interview selection was also limited by the omission of international practitioners. It is likely that professionals who attempt to implement and sustain the ROI Methodology™ outside of the USA may experience different issues, challenges, or constraints related to sustainability of the ROI process model. The sample also omits those individuals who may have successfully implemented and sustained the ROI Methodology™ in previous HRD roles, but who were unavailable for comment because they were no longer with the organization listed in the ROI Institute data base. Another limitation relating to sample size and selection was the omission of stakeholders as an interview source. It is possible that stakeholders, or other decision makers in the organization, would have different or conflicting perspectives about the factors influencing successful ROI process

implementation and sustainability. Lastly, research around the issue of sustainability is focused here upon the implementation of a specific, results-based evaluation model (the ROI Methodology™), in which case results may not be generalized to sustainability of other evaluation approaches. Generalizability is also an issue with regard to the small sample size of respondents in the qualitative phase of research. The investigator attempted to overcome this limitation through a mixed method research design combining comprehensive coverage with an in-depth analysis of individual cases and contexts within which sustainable ROI implementation occurred. This approach has been shown to strengthen validity, extend the comprehensiveness of findings, generate new insights, and incorporate a wider diversity of values (Bamberger et al., 2006).

Another limitation revolved around the voluntary nature of participation. Individuals who elected to be surveyed or interviewed may have been biased towards promoting their sustainability success or describing factors related to their lack of success. In addition, the semi-structured interview process in the qualitative phase of this study asked participants to provide a self-report on their experience. This process may have led respondents to provide information in ways that reflected more favorably upon them and their evaluation role. Subsequently, interviewees' experience with ROI process implementation may not be representative of all professionals who have attempted to implement and sustain the ROI Methodology™ or any other results-based measurement and evaluation approach. Since interviews were conducted by telephone, it is also possible that non-verbal cues were missed, which may have influenced the overall effectiveness of probing questions.

Finally, my personal interest in the topics of sustainability and organizational change may have infused bias in how I interacted with individuals during the data collection process and how I interpreted data during the course of data analysis. While no research is bias-free, to mitigate potential personal bias I adhered to interview protocol and wrote copious field notes after each interview to avoid incorporating my own biases into the interviewing and interpretation process. In addition, two external auditors were invited to help read, code, confirm the accuracy of transcripts, and check for researcher bias in interpretation and thematic analysis. Participants were also provided a copy of their transcript and given the opportunity to make edits or enhancements.

Definitions of Terms

The following terms and definitions relate directly to the scope of this research.

1. *Capacity* is the specific ability of an entity (person or organization) or resource, measured in quantity and level of quality, over an extended period (Herold, Fedor, & Caldwell, 2007).
2. *Capacity Building* refers to: the *means* of strengthening an organization's ability to carry out specific activities; the *process* of enabling an organization to adapt its purpose in response to change and learning; an *end* state where an organization becomes self-sustaining (Bamberger, Rugh, & Mabry, 2006). Some researchers describe capacity building as a perpetually renewing process in which there is no end state (Kusek & Rist, 2004).
3. *Change Agent* is the person (or group of people) who provides change Methodology™ to the organization through project planning, facilitation, education, and ongoing mentorship (French & Bell, 1995).

4. *Change Process Methodology* refers to the purposeful, integrated, and multi-dimensional discipline of informing, designing, and facilitating the desired outcomes of a transformational change while building essential and lasting change competencies and capacities (Anderson & Anderson, 2001).
5. *Contextual Variables* (or factors) refer to those factors that effect how a project is implemented and how successfully it achieves its outcomes and impacts. Contextual variables may include economic, political, institutional, environmental, security, sociocultural, and sociopsychological factors (Bamberger, Rugh, & Mabry, 2006).
6. *Continuous Change Process* refers to the dynamics of how the organization, as a system, draws inputs from both internal and external sources (strategy, resources, environment) and transforms them into outputs (activities, behavior, and performance at three levels: individual, group, total). Based on open systems theory and the “organization as organism” metaphor, continuous change emphasizes that homeostasis rarely occurs because of the ongoing tensions that emerge from interacting, inter-dependent sub-systems (work, people, formal and informal organization) as they repeatedly scan and transform environmental inputs (Herold & Fedor, 2008; Nadler & Tushman, 1997).
7. *Evaluation* is the systematic and objective assessment of an on-going or completed program, project, or initiative, including its design, implementation, and results. The aim is to determine the relevance and fulfillment of objectives, development efficiency, effectiveness, impact, and sustainability. It seeks to give evidence about why targets and outcomes are or are not being achieved.

Evaluation also refers to the process of determining the worth or significance of a program, project, or initiative (Kusek & Rist, 2004).

8. *Human Resource Development (HRD)* is a combination of training and education that ensures the continual improvement and growth of both the individual and the organization. It includes adult and continuing education, development, and training in educational institutions, business and industry, government agencies, health agencies, voluntary organizations, religious institutions, labor unions, mass media, and by commercial providers (Nadler & Nadler, 1994).
9. *Impacts* are the positive and negative, primary and secondary, long-term effects produced by a development intervention, directly or indirectly, intended or unintended (Kusek & Rist, 2004).
10. *Indicators* are those things that point to an issue or condition. Their purpose is to show how well a system is working. If there is a problem, an indicator can help determine what direction to take to address the issue (Kusek & Rist, 2004).
11. *Monitoring* refers to a continuous function that uses the systematic collection of data on defined indicators to inform main management and stakeholders about the extent to which specific development intervention(s) are progressing and achieving success with targeted objectives and progress in the use of allocated funds. Monitoring gives information on where a policy, program, or project is at any given time relative to prospective targets (Kusek & Rist, 2004).
12. *Organizational Change* is something initiated by one or more organizational leaders intended to achieve certain results through new demands or modifications placed on an organization or organizational subunits that require significant

departures from current routines and behaviors and the success of which depends upon the support of those affected (Cameron & Green, 2004).

13. *Participatory Evaluation* is an evaluation method in which key representatives and stakeholders (including beneficiaries) collaborate together to design, carry out, and interpret an evaluation effort (Kusek & Rist, 2004).
14. *Process Evaluation* refers to the evaluation of the internal dynamics of implementing organizations, their policy instruments, service delivery mechanisms, management practices, and linkages among those (Kusek & Rist, 2004).
15. *Program Evaluation* refers to the evaluation of a set of interventions intended to achieve specific development objectives (Kusek & Rist, 2004).
16. *Readiness Assessment* refers to a diagnostic aid and analytical framework for assessing where an organization stands in relation to the requirements for establishing a results-based M & E system. Assessments are based upon an organization's current understanding, capacity, and use of existing measurement and evaluation systems (Kusek & Rist, 2004).
17. *Results-based Measurement and Evaluation (M & E) Systems* are tools to help policy-makers and decision makers track progress and demonstrate the impact of a given project, program, or initiative. Results-based measurement and evaluation differs from traditional M & E in that it moves beyond a focus on inputs and outputs to a focus on outcomes and impacts (Kusek & Rist, 2004).
18. *Return on Investment (ROI)* is the simplest form of measurement of the profitability of programs or projects. With one number, it combines the earnings

(net benefits) compared to the investment (costs) of a program or project and is typically expressed in a ratio (Phillips, 1997b).

19. *ROI Process Model* refers to the comprehensive, step-by-step methodology of collecting and analyzing evaluation data categorized along five levels of results. Includes generating data about intangible benefits as a sixth type of result -- not a sixth level. The ROI process model provides operating standards, guiding principles, and systematic techniques for collecting results-based data, isolating the effects of a program, converting data to monetary value, and identifying intangible benefits of a training or HRD program (Phillips, 1995).
20. *ROI Methodology™ Implementation (or ROI Process Implementation)* refers to the dynamic, holistic process of executing steps, standards, and principles of the ROI Methodology™ while informing, designing, and facilitating the desired outcomes of the ROI Methodology™. It refers to the running or putting into effect the ROI process model for the purpose of evaluating a single program, project, or initiative, as well as a series of programs, projects, or initiatives over time (Bamberger et al. 2006; Phillips, 1995).
21. *ROI Methodology™ Valuation* refers to the process of assigning organizational value to the ROI Methodology™ in terms of its capacity to provide credible, relevant performance measures around desired business outcomes (in such categories as labor savings, risk avoidance, productivity gains, and/or revenue gains from increased customer acquisition, customer or employee retention, increased sales, among others). The outcome of ROI Methodology™ valuation is the positive impact of the ROI Methodology™ on organizational performance and

effectiveness. Impact may refer to cumulative cost savings and/or cost avoidance.

Conducted by client groups of the ROI Methodology™, a valuation assessment is often known as the “ROI on the ROI.”

22. *Stakeholders* are defined as any individual or group interested in or involved in the program, process, or initiative being evaluated. Stakeholders may include those who have decision making capability over the program (Rossi, Freeman, & Lipsy, 1999).

23. *Sustainability* refers to the continuation of benefits from a development intervention after major external and/or internal assistance has been completed; it is the resilience to risk of net benefit flows over time. In an organizational context it means thinking holistically about environmental, social, and economic impacts over the long term (Kusek & Rist, 2004).

24. *System* is defined as an organized, unitary whole composed of two or more interdependent parts, components, or subsystems, and delineated by identifiable boundaries from its environmental suprasystem. System denotes interdependency, interconnectedness, and interrelatedness of a set of elements that constitute an identifiable whole (French & Bell, 1995).

Summary

The demand for accountability through measurement continues to increase in federal and state agencies, foundations, and nonprofit programs, especially in light of increased costs for programs and initiatives. These trends have heightened application and use of the ROI Methodology™ as an essential part of human resource development and program evaluation in both private and public sector organizations. Although

progress has been made towards identifying common elements in successful ROI process implementation, sustainability of the ROI process model is an aspect of implementation that is often overlooked and under-estimated.

Effective integration means that principles and practices of ROI process model extend beyond implementing results-based evaluation processes within the life-cycle of a single impact study. It means that results based evaluation processes are fully endorsed, at all levels, by those who must make it work and that it is blended into the culture and infra-structures of an organization so that it remains credible, flexible, and responsive to continuously changing needs and complex environmental conditions.

This mixed method research focuses upon determining the characteristics of sustainable ROI process implementation and is intended to guide leaders and practitioners in assessing the ongoing readiness needs, change issues, environmental complexities, and resource challenges associated with sustainable development and deployment of the ROI process model.

CHAPTER II

REVIEW OF RELATED LITERATURE

Introduction

This research began with a review of the literature on HRD, focusing on employer-sponsored training and trends towards accountability and results. Employer-sponsored training has its roots in apprenticeship agreements dating back to colonial times. During the nation's transition from agrarian to industrialized between 1870 and 1906, a consensus emerged that a system of workforce education was needed to foster continued economic growth, particularly in light of increased competition from international competitors. In the last decade, there has been a persistent move towards measurable added value and "evidence based interventions" (Pershing et al., 2008), with the use of return on investment (ROI) emerging as an essential part of a measurement and evaluation system. Heightened interest in ROI is driven by a new generation of clients and sponsors who are demanding evidence that monetary resources are allocated to programs, processes, and projects that yield the greatest return and payback (Callahan & Kloby, 2009; Fitz-enz, 2000; Kusek & Rist, 2004; Phillips & Phillips, 2007b; Phillips & Phillips, 2010; Savitz & Weber, 2006; Ulrich & Brockbank, 2005).

The academic and practitioner literature was reviewed to identify how evaluation theory, frameworks, and processes were applied in HRD practice. The Kirkpatrick four-level taxonomy was the most frequently cited framework identified in the academic literature. Practitioner literature cited the five-level framework by Jack Phillips most often. Given that Phillips' ROI Methodology™ is an extension of Kirkpatrick's and serves as the primary focus of this research study, literature review relied more heavily

on applied use of the Phillips' model. Figure 2.1 represents the researcher's depiction of the literature review process, adapted from guidelines presented by Hart (1998).

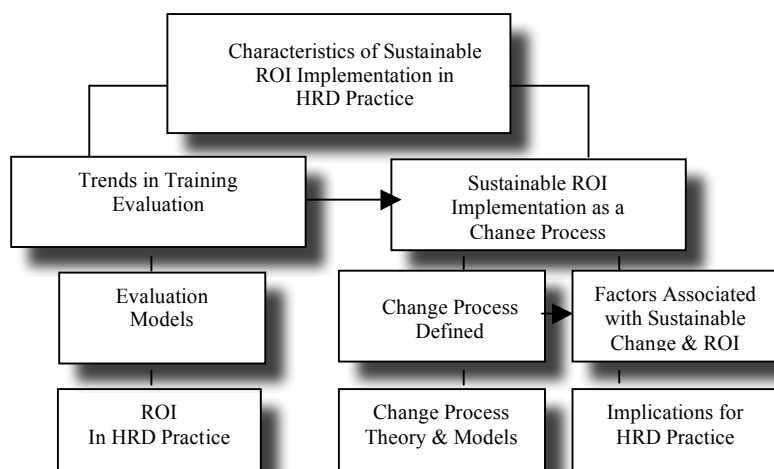


Figure 2.1. Literature Review Process

Note: Adapted from *Doing a Literature Review* by C. Hart, 1998.

Background information was derived from books, academic journals, professional journals, and websites that focused on HRD, training evaluation, program evaluation, organizational change theory, capacity building, and sustainability. Databases such as ERIC and Dissertation Abstracts also provided relevant research information. The following provides a partial list of the journals used to inform the literature review and provide insight into related trends and issues in human resource development, HRD program evaluation, sustainable implementation planning, and evaluation capacity building.

1. The Academy of Management Journal
2. The Economist
3. The International Journal of Knowledge, Culture, and Change Management

4. Harvard Business Review
5. Human Resource Development Quarterly
6. Industrial and Commercial Training
7. Journal of Applied Behavioral Science
8. Journal of Applied Psychology
9. Journal of Intellectual Capital
10. Journal of Occupational and Organizational Psychology
11. Journal of Mixed Methods Research
12. Personnel Psychology
13. Performance Improvement
14. Performance Improvement Quarterly
15. T & D Journal

Trends in Human Resource Development

Trends such as a changing workforce with greater diversity, a shrinking leadership pipeline, competition and deregulation, rapid advances in technology, and increased globalization are driving organizations to take proactive steps for human resource development. During the last decade, over fifty articles were published in *Performance Improvement* alone on the topic of globalization and its impact on organizational learning and performance requirements. Other workforce trends such as labor shortages, unstable economic conditions, rising diversity, an aging workforce, new organizational structures, and a sharper focus on innovation have all led to a growing reliance on a human capital based economy (ASTD, 2004; Ulrich & Brockbank, 2005).

Human capital theory has a foundational base in micro-economic theory and suggests that a primary source of economic value in any organization resides in the collective knowledge, skills, and abilities of its people. As such, the cornerstone of human capital management theory is that every effort should be taken, whether formally or informally, to treat people as an asset rather than an expense, to develop skills and abilities, and to provide opportunities for people to maximize their contribution (Becker, 1994; Torraco & Swanson, 1997). While the concept of human capital was used by economists as far back as the eighteenth century, the issue of human capital investment has gained unprecedented focus during the last decade. For example, in the ten year span from 1993 to 2003, the number of documents containing the term “human capital” rose from 700 to over 3,000 (Phillips & Phillips, 2008).

Human capital management is a challenging, multi-faceted process that requires effective business alignment and clearly defined criteria for measuring impact or effectiveness. Research shows that the most successful companies are those that manage human capital resources in an effective and efficient fashion — by investing in the workforce education and development of their workers, encouraging workers to invest in themselves, and by providing a supportive learning environment (Becker, 1994; Carter et al., 2004; Fitz-enz, 2000; Ulrich, 1997; Ulrich & Brockbank, 2005). Traditional measures of human capital or HRD effectiveness are being replaced by more difficult-to-measure items that represent those issues that can make a significant difference in an organization’s growth or success (Phillips, 2003b, 2005). For example, Phillips (1996) conducted one of the first major studies to demonstrate that HR investment (divided by operating expense) was significantly correlated with gross productivity (revenue for

employee) and profitability (operating income per employee) measures in 72 organizations.

Increased investments in workforce education and training have led to increased emphasis on human capital accounting practices, process maps, or measurement and evaluation systems to help public and private sector organizations know more about what human resource efforts are costing and track their level of payoff (Bell & Morse, 2001; Callahan & Kloby, 2009; Fitz-enz & Bontis, 2002; Henriques, 2004; Phillips & Phillips, 2007b). To that end, the GAO (General Accounting Office) Personnel Act was passed in 1980 and represented the first, significant step away from traditional human resource management in the public sector. Specifically, this Act gave government agencies the ability to establish a performance-based pay system for some employees and provided a sweeping “transformation push” that included a first-ever strategic plan for developing GAO’s number one asset --- its staff (Walters & Thompson, 2005).

Human resource management reform continues to play out in the both the public and private sector as organizations come to realize that not only is the human capital of their employees a major asset, it is also a depreciating asset that needs continual review, assessment, and re-investment (Fitz-enz & Bontis, 2002; Simonson, 1997; Ulrich & Brockbank, 2005; Walters & Thompson, 2005).

Trends in Training Evaluation

Given increased pressure to show the bottom line impact of HRD investments, trends show that public and private sector organizations across the United States, and in developing countries worldwide, are increasing their investments in measurement and evaluation with best practice groups spending three to five percent of the learning and

development budget on measurement and evaluation (Phillips & Phillips, 2008). In addition, training dollars invested per employee increased by 6% from dollars invested in 2006 (ASTD, 2004). Despite challenging economic times, this data shows that organizations continue to demonstrate a commitment to developing the knowledge and skills of their workforce. This commitment has led to an increased focus on systemic approaches to training evaluation, which has also spread to developing countries in light of rising demands to meet donor requirements, international development goals, or, in some cases, both external and internal social and economic pressures (Bamberger et al., 2006; Kusek & Rist, 2004; Phillips, 1999; Preskill & Russ-Eft, 2005; Willmore, 2001).

Training evaluation, broadly defined, is the systematic and objective assessment of an on-going or completed program, project, or initiative, including its design, implementation, and results. Evaluation also refers to the process of determining the value or significance of a program, project, or initiative (or series of initiatives) in terms of its fulfillment of objectives, development efficiency, effectiveness, business and financial impact, and sustainability (Kusek & Rist, 2004).

A number of evaluation frameworks and processes have been documented in the literature. Dessinger and Moseley (2006) describe four types of evaluation that comprise a holistic, full scope model of evaluation as it applies to human performance technology (HPT) and performance improvement work. As shown in Table 2.1, this framework provides a focus for comparing evaluation timing, purpose, and customer groups among each of the four types.

Table 2.1

Evaluation Types

Type	Focus	Timing	Purpose	Customer
Formative	HPT process of performance gap, & cause analysis; intervention selection, design & change; process outcomes	During design, development, or pilot testing	Improve design, development, processes, outputs	Primary: Design teams Secondary: Decision-makers
Summative	Immediate intervention outcomes, such as reaction, accomplishment, & immediate impact	During or immediately after full implementation	Assess immediate outputs, outcomes	Primary: Customers, Decision-makers Secondary: Design team
Confirmative	Long-term intervention outcomes of efficiency, effectiveness, impact, & value	3-12 months after full implementation	Assess effectiveness, impact, value over time	Primary: Decision-makers, users Secondary: Design teams
Meta	Attributes of evaluation process [or system] itself, such as validity, reliability, & accountability	Type one: Concurrent with development, implementation Type two: After development, implementation	Validate evaluation process, products, outputs	Primary: Evaluators Secondary: Decision-makers, users

Note: Adapted from *The Full Scoop on Full Scope Evaluation* by J. C. Dessinger & J. L. Moseley, 2006.

Table 2.2 shows several prevalent evaluation models with a brief description of their measurement focus.

Table 2.2

Prevalent Training Evaluation Models

Evaluation Framework and Process	Description
Cost Benefit Analysis (Kearsley, 1982)	Theoretical basis: economics (welfare) & finance (public). Kearsley applies traditional Cost Benefit Analysis to product training with a 7 step approach for identifying stakeholders, values, and comparing program costs to benefits.
CIRO (Warr, Bird, & Rackman, 1970)	Context (Context, Input, Reaction, Outcome). Presents another four level framework to obtain and use information about training objectives, inputs, resources, and outcomes.
Kaufman's Five-Levels of Framework (Kaufman & Keller, 1994)	Expands upon Kirkpatrick's four level framework by adding a fifth level that addresses societal, "mega" issues and environmental impact.
CIPP (Stufflebeam, 1983)	Examines: Context (relevance of program objectives to organizational culture); Input (assesses content as well as methods); Process (nature of implementation, materials, facilitator); Product (compares program outcomes to intent of objectives).
Marshall & Schriver's Model of Evaluation Knowledge and Skills (1994)	Used to measure knowledge/skills across five levels, including: Level 1 (measures attitudes about instruction, instructor); Level 2 (measures knowledge/skill gains with paper, pencil tests); Level 3 (measures knowledge/skills through required demonstration of proficiency); Level 4 (measures knowledge/skill transfer with observation after the program); Level 5 (measures organizational impact and ROI).

Table 2.2 - *Continued*

Evaluation Framework and Process	Description
Kirkpatrick's Four Level Framework (1994)	Describes four levels of evaluation data including: Reaction (Level 1); Learning (Level 2); Behavior (Level 3); and Results (Level 4), which assesses program influence on organizational effectiveness.
Utility Analysis (Cascio, 1999)	A process by which expected outcomes and the costs of decisions are taken into account.
Success Case Method (Brinkerhoff & Dressler, 2002)	Uses purposive sampling to obtain participant input about most and least successful knowledge or skill gains following a training program. Includes use of a survey and in-depth telephone interviews to tell stories about the business value of learning.

Of the existing models, the four-level framework developed by Kirkpatrick is the most widely recognized and referenced in the academic literature. Phillips (1997a) expanded upon Kirkpatrick's four level schema to incorporate a fifth level of evaluation - return-on-investment (ROI) - for capturing the financial impact of workplace learning and development programs. Some researchers contend that Kirkpatrick's fourth level actually represents ROI (Lanigan, 1997). However, the fifth level in Phillips' ROI Methodology™ represents the cost-benefit analysis needed to calculate an actual ROI upon specific changes in business measures. In addition, Phillips' evaluation framework includes techniques for isolating the effects of the program from other influences. Since research shows that on-the-job behavioral improvements are influenced by a number of factors, this step provides valuable data about the direct contribution of a training solution

(Broad, 2008; Broad & Burkett, 2007; Phillips, 1997; Phillips et al., 2006; Phillips & Aaron, 2008).

ROI in HRD Practice

As the need for accountability and demonstrable results has grown, so have the uses and applications for results-based M & E systems like the ROI Methodology™. While there are various approaches to evaluating the results and business outcomes of workplace learning programs, the ROI Methodology™ represents one of most credible and widely used evaluation systems used by private and public sector companies around the world. For instance, over 4,000 organizations in 52 countries have formally implemented the ROI Methodology™ and almost 2,500 individuals have been certified to implement the process within their organizations (Phillips, 1997b). Five casebooks have been developed to show how the ROI Methodology™ has expanded to all types of investments including training and education, change initiatives, and technology based efforts (Phillips & Phillips, 2007a). Table 2.3 illustrates sample organizations that have successfully applied this Methodology™ to diverse HRD initiatives, along with reported results.

Table 2.3

Sample Organizations that have Successfully Applied the ROI Methodology™

Case Study	Key Impact Measures	ROI
Crackerbox	Productivity, quality, time, costs, turnover, absenteeism	298%
Imperial National Bank	Team projects, individual projects, retention	62%

Table 2.3 - *Continued*

Case Study	Key Impact Measures	ROI
Nations Hotel	Cost reduction, sales growth, operating efficiency, customer satisfaction	21%
Apple Computer	Labor efficiency, productivity (downtime, error rates, rework), retention	183%
Nextel Communications	Retention, employee satisfaction	163%

Sustainable ROI Implementation as a Change Process

Despite implementation progress with the ROI Methodology™ for summative and/or confirmative evaluation purposes, sustainability of the methodology as a full scope (Moseley & Dessinger, 1998) measurement and evaluation system or business process is an aspect of implementation that is often overlooked and under-estimated (Phillips et al., 2006; Phillips & Phillips, 2007b). Evaluation research shows that internalizing a results-based evaluation model into a service strategy or function has proven to be a complex undertaking that requires fundamental, cultural changes to policies, processes, and programs across all organizational levels (Bamberger et al., 2006; Kusek & Rist, 2004; Phillips, 1998).

Evaluation research supports the concept of sustainable ROI process implementation as a cultural and complex change process because it a) requires practitioners to conceive broad-based, new methods of data collection, data analysis, data retrieval, and data reporting, among other duties, and b) introduces evaluation procedures, routines, processes, or systems that require increased organizational

accountability and transparency with respect to performance results. For ROI process implementation to be successful and sustainable, the issue of how these changes will be facilitated must be addressed (Bamberger et al., 2006; Isaakson & Hallencreutz, 2008).

What is a Change Process?

Change can be described as the process of moving from one “old” system to another “new” (transformed) system (Cameron & Green, 2004) and it is characterized as complex when attitudinal and behavioral changes are required (Goodwyn, 1996).

Transformational change is characterized as broad, evolutionary phenomenon that requires a multi-dimensional, integrated, process-oriented strategy because changing one element of an organizational structure, process, or culture requires changes in other organizational structures, processes, or cultures for institutionalization or “freezing” of change to occur. Transformational change demands change readiness and continuous adaptability from both the organizational system and its individual members (Amble, 2010; Anderson & Anderson, 2001; Cameron & Green, 2004; French & Bell, 1995; Lewin, 1951; Nadler & Tushman, 1997).

Change Process Theory and Models

Change Process Methodology refers to the purposeful, integrated, and multi-dimensional discipline of informing, designing, and facilitating the desired outcomes of a transformational change while building essential and lasting change competencies and capacities (Anderson & Anderson, 2001). Appleby & Tempest (2006) describe the successful application of a planned change process to support the implementation of a new clinical framework into an occupational therapy service at a teaching hospital in London. The authors outline how Kotter’s (1996) eight-stage change process was

integrated into a staged implementation effort in order to: provide evidence that the change was needed; define the context in which the new framework would be used; create a guiding, multi-disciplinary implementation team with enough authority to lead the change; proactively address barriers and unexpected conflicts; generate short-term “wins”; and anchor the new approach in the culture. In this case study, the change was introduced over a 2 year period and has been continually invigorated. Despite challenges in executing and adhering to change process strategies, conclusions suggest that the quality and effectiveness of this intervention was significantly enhanced by employing an explicit change process (Appleby & Tempest, 2006).

Similarly, project management literature emphasizes the need to incorporate change methodology into project initiatives in order to enhance the adaptive capability of project teams and improve project success. For example, no matter how well structured and planned, once a project begins there are obstacles and challenges that require redesigning the plan or creating work-around solutions to help meet broader project objectives. While some problems may involve technical issues that can be solved by applying expertise, others require solutions that are more adaptive and focused on navigating human emotions and behavior. Most problems are a combination of both and require adaptive change capability that allows project leaders and members to manage ambiguity and create flexible solutions to keep projects on track (Power, 2007).

In much the same manner, applied use of a change process methodology can significantly influence the successful introduction and “anchoring” of the ROI Methodology™ as an evaluation framework for training, human resource development, or performance improvement service areas. The literature cites countless approaches for

understanding and managing a change process. Some of the more prevalent change theories, models, and frameworks are shown in Table 2.4 (Biech, 2007; Cameron & Green, 2004).

Table 2.4

Prevalent Change Theory Models

Year	Developer	Description
1951	Lewin	Three Step Model: Unfreezing, changing, freezing. Field theory. Driving, restraining forces. Force field analysis is a predominant, useful tool, especially when addressing readiness at the start of the initiative. Can become mechanist, as in “plan, do, check.”
1965	Tuckman	Forming, Storming, Norming, Performing (team change, stages of team development).
1983	Rosabeth Moss Kanter	Departures from tradition and crises; strategic decisions and prime movers; and action vehicles and institutionalization.
1985	Bullock & Batten	Planned change focus, draws on disciplines of project management. Exploration, planning, action, integration. Tends to oversimplify, ignores resistance and overlooks interdependencies between units or subsystems.
1986	Tichy & Devanna	Act I: Awakening; Act II: Mobilizing; and Act III: Epilogue, Reinforcing
1990	Carnall	Change management model. Combines a number of elements and skill areas: managing transitions, dealing with cultures, managing organizational politics.
1991	Bridges	Ending, Neutral Zone, New Beginning. Focus on transitions, “letting go” versus planned change (physical restructuring). Describes planned change as situational; transition as psychological. Useful for changes such as mergers and acquisitions; less constructive for internal changes where ending and beginnings are not as distinct.

Table 2.4 - *Continued*

Year	Developer	Description
1992	Schein	Unfreezing, Learning New Concepts, Internalizing (refreezing).
1997	Nadler & Tushman	Congruence Model. Provides a checklist for a change process. Uses a Seven S approach for examining how interdependent, organizational subsystems scan and transform inputs from the internal, external environment to outputs. across three levels (individual, group, total). Based on open systems theory. Encourages a problem focus versus a vision setting process.
1999	Senge	Systemic model. Organizations as organism. Challenges the concept of top-down “hero-leader” change & large scale organizational change. Advises to start small, grow steadily, don’t plan the entire effort. Often unrealistic in fast-paced, change turbulent environments.
2008	Herold & Fedor	Context, Content, Process. Change must be contextualized, customized, and readiness-based and must use a cascaded or staged process to address capacity issues related to change turbulence. Change is not a singular event and cannot be managed - it continually emerges. Prescriptive change management strategies and one-size-fits-all “steps” do not address dynamic, fast-paced organizational environments characterized by rapid, concurrent, competing “white water” change demands.

While this list is by no means comprehensive or exhaustive, it is clear that there are advantages and disadvantages to each approach, that none reflect the true complexity of how a change really happens, and none suggest a single uniform approach to sustainable implementation of a comprehensive M & E system. The intent of this research is not to investigate or advocate a specific change approach for sustainable ROI implementation. Rather, the purpose is to examine the association between *change*

process perspective and *planned change practice* and the degree of sustainable implementation with the ROI Methodology™.

Factors Associated with Sustainable Change and ROI Implementation

While there is no best way to manage change as an omnipresent feature of organizational life, recognition of the change components associated with implementing and sustaining the ROI Methodology™ can help organizations target interventions and allocate resources to those leverage points that will have the greatest influence on its change adaptability and utility. Ensuring the long-term adaptability and functionality of the ROI Methodology™ provides a consistent, credible process for helping decision makers focus on HRD programs that provide the most value returned for resources invested. This is an important aspect of implementation since implementation and sustainability go hand in hand. A measurement and evaluation system that is has no utility will not be sustained (Bamberger et al, 2006; Bell & Morse, 2001; Cutt & Murray, 2000; Kusek & Rist, 2004).

The literature identifies multiple factors associated with change implementation success, evaluation capacity building, and sustainability of the ROI Methodology™. These include: credible leadership; internal support from key executives and stakeholders; contextualized implementation planning; alignment (congruence) with business culture and strategy; clear roles and responsibilities; resource allocation; performance support; individual and organizational capacity, and change readiness (Bamberger et al., 2006; Bell & Morse, 2001; Burkett, 2005a; Hailey & Balogun, 2002; Kusek & Rist, 2004; Mourier & Smith, 2001; Phillips & Ekeles, 2007; Phillips et al., 2006; Phillips & Phillips, 2007b; Thibault & Kelley, 1952). For implementation of the

ROI Methodology™ to be sustainable and flexible in the face of changing needs and dynamic, diverse business conditions, the following factors must be addressed.

Leadership Factors

Organizational leadership, both formal and informal, as well as active and effective change agents exert significant influence over the success of a sustainable, systemic implementation. Research by Burke (1994) showed that interventions directed towards leadership, mission, strategy, and organizational culture produced transformational change and “leaps in behavior”, whereas interventions directed only towards management practices, structures, systems were less powerful in producing lasting change. O’Neill (2000) identified five specific leadership roles necessary for a successful and sustained change effort, including: sponsor; sustaining sponsor; implementer; change agent, and advocate.

Leadership Roles: Sponsorship

Sponsors are those organizational decision makers who control the resources needed to implement a desired change, process, or system. Field theory (Lewin, 1951) also identifies the role of organizational leaders as “critical actors” whose support is crucial to the success of a planned change process. In terms of ROI Methodology™ implementation, sponsorship can occur at any organizational level, but the ROI Methodology™ is most frequently introduced to the organization through sponsors representing the Human Resource Development function of the organization.

HRD Sponsorship Issues with ROI Implementation

Despite rising demands for measures of human resource effectiveness and the prevalence of existing measurement models available, the HR function – to which many

training departments or evaluation specialists report -- has shown an alarming and prevailing lack of progress in leading, sponsoring, or supporting efforts towards increased accountability. More than 25 years ago, a noted Harvard Business School professor wrote an article entitled "Big Hat, No Cattle: Managing Human Resources" complaining that HR was not delivering "the beef." (Skinner, 1981). Over 10 years ago, an article in Fortune magazine (Stewart, 1996) described HR as "the last bureaucracy" and then proposed the following:

I am describing, of course, your human resources department, and have a modest proposal: Why not blow the sucker up? I don't mean improve HR. Improvement's for wimps. I mean abolish it. Deep-six it. Rub it out; eliminate, toss, obliterate, nuke it; give it the old heave-ho, force it to walk the plank, turn it into road kill.

Most recently, a June 2005 Business Week article "Why HR Gets No Respect" and an August 2005 Fast Company article, entitled "Why We Hate HR" characterized the function as a "dark bureaucratic force that blindly enforces nonsensical rules, resists creativity, and impedes constructive change" (Hammonds, 2005). HR's seat in the C-Suite has not been uniformly accepted. CFO Research Services (Taub, 2003) found that HR reports to the CEO in only about 52% of companies. HR reports to the COO in about 17% and to the CFO in about 13% of the cases. In addition, boards of directors have differed widely in the extent of their utilization of the HR leader in the strategy of the organization. In fact, over half (54.8%) of HR professionals surveyed in a 2004 Society for HR Management (SHRM) Global Forum on "The Maturing Profession of Human Resources Worldwide" cited "not being held in high esteem by the organization" as the

most frequently encountered obstacle to career advancement (Vosburgh, 2007).

There have been many explanations offered for the current status of HR, including tendencies to be too “transaction oriented” or too rule bound (Huselid et al., 1997). In an attempt to determine if there were statistically significant differences that might account for HR's lack of regular participation in corporate-wide strategy and policy decision forums, a research study was conducted to compare twenty-six (26) Vice Presidents of Human Resources with 207 VPs of other functions. The research discovered a statistically significant discrepancy ($p < .05$) that can account for the difficulty HR has in earning its “seat at the table.” Specifically, findings determined a systematic difference between HR executives and other executives who already have a proverbial “seat at the table.” Senior HR executives were found to “talk the same language” as their peers in their *short-term information processing* approach to issues. In this study, the area where HR was found to fall short focused on offering critical analysis and assessment of options, coupled with cogent and compelling postures on matters of *future consequence* to the organization. The impact of this difference was a negative effect upon HR’s credibility as a business partner, especially in terms of their ability to consistently contribute to organizational policy setting and strategic planning (Salton, 2007).

These findings are consistent with evaluation research that suggests most organizational leaders – in either the HR or L & D space -- plan for ROI process implementation with a short-term, activity-based focus and neglect to plan for strategic, long-term, systemic integration of a comprehensive M & E system (Anderson & Anderson, 2001; Burkett, 2004; Cloete, 2005; Kusek & Rist, 2004; Phillips, 2007a;

Phillips et al., 2006). In addition, change theory cites flawed business reasoning (i.e. what was changed did not support overall business strategy or the change addressed the wrong issue) and poor credibility of the “person leading the charge” as common causes for change or project implementation failure (Bedeian, 2004; Herold et al., 2007; Jaffe & Scott, 1999; Kaufman & Keller, 1994; O’Neill, 2000; Schein, 1990).

The Sustaining Sponsor Role

Sustaining sponsors are those individuals or stakeholders (staff, managers, clients, board members, labor unions, community members, funders), inside and outside an organization, responsible for leading or supporting a change effort in their own functional area of the organization. Field theory (Lewin, 1951) recognizes the “decisive impact” of key stakeholders, termed “facilitating actors”, in the short and long-term success of change interventions. The 1990’s brought continued and substantial theoretical contributions to the literature regarding the role of stakeholders in supporting, implementing, and sustaining an evaluation change process (Gayeski, 1995; Holton, 1996; Huselid, Jackson, & Schuler, 1997; Langdon, 1992). Evaluators spend considerable time and effort helping stakeholders understand critical points about evaluation design or methods and how to use evaluation data to improve programs or processes (Cutt & Murray, 2000). In a study of 210 North American change efforts, Mourier and Smith (2001) also identified the factor of “support from other executives and departments” as being significantly correlated with change and implementation success. From the perspective of sustainable ROI process implementation, sustaining sponsors, particularly immediate supervisors of training program participants, exert significant influence upon successful achievement of targeted performance objectives.

Evaluation literature cites “support from immediate supervisor” as a critical factor influencing the successful transfer of learned knowledge and skills back to the workplace (Broad, 2008; Broad & Burkett, 2007; Michalski & Cousins, 2001; Phillips & Schmidt, 2004; Rummier & Brache, 1995).

Implementation Factors: The Implementer Role

Implementers are the project managers who manage and direct the change, report to the sponsor(s), and give feedback on change progress. Poor implementation planning has been identified by Phillips (2008) as a recurring barrier to organizational support and internalization of the ROI Methodology™. Detailed implementation planning and a disciplined project management approach are required to keep the process on track. Implementation schedules, evaluation targets, data collection plans, ROI analysis plans, measurement and evaluation policies, timetables, milestones, follow-up schedules, and resource commitments are key. Adequate scope is another important implementation issue related to sustainability and resiliency of the ROI Methodology™. Human resources are finite. Assessment of scope should consider long distance impacts on human capital assets and ensure that future needs are addressed while satisfying short-term organizational demands (Bell & Morse, 2001; Cloete, 2005; Fuller, 1997; Metzenbaum, 2008). This implies the need for performance indicators and routine monitoring mechanisms to ensure that schedule, scope, and resource requirements are being met and that performance measures are regularly adjusted over time to reflect changing business conditions, emergent demands, and potential risk issues or constraints. In “7 Tips for Sustainable Results,” Hale (2009) defined governance oversight, clear

operating standards, and sustained leadership attention in the form of performance monitoring as critical success factors for a major implementation or change intervention.

Building the right implementation team is another critical component of a successful, sustainable ROI process implementation. Research shows that an effective implementation team is one that is assembled with the right number and right mix of culturally and functionally diverse individuals -- with the right information, skills, resources, incentives, and tools -- to accomplish all related change tasks. Implementers need to provide teams with clear goals, defined priorities, and sound mechanisms for handling differences in a collaborative fashion (Cutt & Murray, 2000; Fuller, 1997; Hale, 2009). This includes setting norms or standards for both *task* behaviors (ie. what tasks the team accomplishes – performance functions) as well as *maintenance* behaviors (ie. how the team accomplishes tasks – development functions). Researchers Mourier & Smith (2001) have identified the factor of “people understood what they had to do...” as being very highly correlated ($p=.0005$) with immediate and sustainable change success.

Recognizing sustainable ROI process implementation as a continuous change process has implications for the way the Methodology™ is implemented and the way in which evaluation tasks are managed. A change process perspective provides structure to the often complex process of managing the human elements of a project by defining the tasks, roles, milestones and timelines required to achieve short and long-term project objectives. A change process perspective also translates the language of human behavior into the language of project management and, in practice, identifies pathways for adaptive solutions required to overcome project challenges. This is essential because it helps implementers more clearly understand the relationship between technical

evaluation activities and the actions required to achieve and sustain required behavioral changes in the face of continuous flux and perpetual change (Van Slyke, 2009).

Change theory describes various, predictable stages of change response through which individuals and organizations progress in covert and overt responses to change (Burke, 1994; Jaffe & Scott, 1999; Prochaska, Prochaska, & Levesque, 2001). As the ROI Methodology™ becomes embedded in the organization, the following cyclical stages of progression have been identified in evaluation literature: Recognition, Reservation, Renewal, and Integration (Burkett, 2007; Phillips et al., 2006; Phillips & Tush, 2008).

For sustainable implementation results, implementation planning must incorporate change strategies that take into account individual, interpersonal, and organizational levels of change and how they interact with one another (Adams et al., 1976; Herold & Fedor, 2008; Mayeno, 2007; Tuckman, 1965). To that end, a customized “staged-matched” transition strategy has proven more effective in achieving desired outcomes or change states than implementation plans that are conducted as a “quick fix” or a one-size-fits-all approach (Prochaska et al., 1997). The concept of a staged-matched intervention is based upon the idea that the level of intervention in an implementation plan is contingent upon the change that is desired and that groups (departments, teams, units, sites) within the organization may be at different stages of response simultaneously. For example, some pockets of the organization may be more ready than others to move forward to model the impact of the change and its benefits. In addition, groups that may have reached an Integration stage with internalization of the ROI Methodology™ in one phase of implementation may revert to earlier stages of Reservation or resistance during

later stages of implementation due to attrition of key staff, competing or conflicting business demands, diverted resources, wavering commitment from sponsors, or changing capacity issues due to change turbulence or resource constraints (Herold & Fedor, 2008; Phillips et al., 2006; Wallace, 2001). For these reasons, a staged-matched intervention plan works best to leverage internal change agents who give different processes a different emphasis in different stages of change for different parts of the organization, as needed. The varying change agent roles associated with this approach include: catalyst, process helper, solution giver, and resource linker (Goodwyn, 1996; Phillips, et al., 2006, Phillips & Tush, 2008).

Change Factors: The Change Agent Role

While the role of formal leaders is critical, change often comes about as a result of the persistent advocacy by staff members who assume a change agent role (Goodwyn, 1996). Senge (1999) argues that such “dispersed leadership” is actually more effective than “top-down” leadership approaches focused upon a “hero-leader” to bring about desired changes. Senge contends that programs or implementation efforts driven from the top tend to foster cynicism and that significant organizational change can only occur at the “networking” level of interface between project teams, groups, and functions.

Edwards and Lounsberry (2008) describe a situation in which they served as change agents to develop networks and enlist leadership support for the ROI Methodology™ in a global media organization that was not ready to adopt the ROI process model on a large scale organizational level. In this case, Edwards and Lounsberry conducted a small, pilot study to positively demonstrate the value of the ROI Methodology™ to management, including the vice president of human resources and two

directors of human resources. Since change agents often take risks by raising unpopular issues with limited support from organizational decision makers, project teams comprised of individuals from different departments are sometimes formed to help support, develop and implement change strategies. In another example from a health care corporation, an evaluation project team was formed to help introduce and implement the ROI Methodology™ on an enterprise-wide level (Stamp et al., 1998). As Stamp et al. stated:

Members of the group have found support in each other and have found their own belief in the value of ROI to keep them moving forward. As we develop our expertise and see the successful completion of our projects continue to work and partner with managers and the senior executive team, we feel confident that our enthusiasm and success will help sustain us through implementation throughout the system (p. 75).

Peer networks and evaluation “communities of practice” have proven to have a catalyzing effect on both the early adoption of the ROI Methodology™ as well as its sustainability as a tool for continuous process improvement and organizational learning (Wallace, 2001).

Organizational change leaders don’t always come from within the organization. External change agents are often effective in catalyzing organizational change (Prochaska et al., 1997). In this case, it is crucial that consultants be adept at conceptualizing the context for change. Conversely, Hyde (2003) found that consultants cannot be effective if they fail to learn the organizational context or are unable to anticipate and address psychological fears, discomfort, or anxieties associated with a complex change process. The lack of capability and competence of a consultant as change agent can be a hindrance

and restraining force to a planned change process (Gayeski, 1995; Hale, 2009; Langdon, 1992). To that end, sustainable implementation results can only be achieved if implementation plans are not only contextualized and customized, but also competency-based to ensure that specialized skills and knowledge are effectively introduced and adopted by leaders and stakeholders (Callahan & Kloby, 2009; Fuller, 1997; Mayeno, 2007).

The Change Advocate Role

Advocates are those organizational members with a transforming idea that need a sponsor to make it happen. Burkett (1999) describes how a change advocate role was used to elicit sustaining sponsorship from a credible production manager, who in turn engaged formal sponsorship from an operations director in support of a pilot ROI implementation within a dynamic manufacturing environment. Results from the study led to tangible improvements in productivity, quality, and labor efficiency measures. In addition, pilot study participants were recognized for their contribution to strategic operational goals, which in turn led to increased visibility and internal support as they embraced change agent and advocacy roles to promote the ROI Methodology™ within respective functions of the organization.

Contextual Factors

Context can be described as everything that surrounds a task, including the social and psychological climate in which it is embedded. Contextual factors refer to internal and external factors, including climate and leadership, that effect how project tasks are implemented and how successfully its outcomes and impacts are achieved. Force field analysis applies the concepts of field theory to contextual analysis by emphasizing the

importance of identifying and evaluating internal and external, driving and restraining forces as a critical step in the change process (Lewin Group, 2002; Lewin, 1951). Within this construct, implementation leaders must evaluate the contextual forces that influence a change process in terms of: potency (the extent to which the increase or decrease of this force will effect the desired outcome); amenability to change; and consistency (the extent to which the force will remain stable if changed or unchanged) (Carleton & Stevens, 2004; Cox, 2001; Moss, 2007; Moynihan, 1997).

Evaluation research supports the concept that too little emphasis has been placed on assessing the organizational, political, and cultural contexts in which the measurement and evaluation system is meant to function (Bamberger et al., 2006; Cutt & Murray, 2000; Hailey & Balogun, 2002; Rouiller & Goldstein, 1993). Proper contextual analysis and environmental scanning would show that many public and private sector organizations lack values, policies, planning processes, and organizational infrastructures to support competent evaluation practice (Broad & Burkett, 2007; Hailey & Balogun, 2002; Huselid et al., 1997; Kusek & Rist, 2004; Prochaska et al., 2001; Russ-Eft & Preskill, 2001). Proponents of evaluation competence have also stressed the need for a contextual, systems approach that incorporates a focused organizational change process along with the development of individual competencies (Bamberger et al., 2006; Broad, 2008; Burkett, 2007; Callahan & Kloby, 2009; Lewin Group, 2002; Kusek & Rist, 2004; Pershing et al., 2008; Phillips et al., 2006; Phillips & Tush, 2008; Prochaska et al., 2001; Rummier & Brache, 1995).

Many change projects and ROI process implementation efforts have resulted in disappointment because leaders lacked the contextual perspective of the organization as a

complex social system with interdependent components (Broad, 2008; Cox, 2001; Herold et al., 2007; Huglin, Johnson, & Marker, 2007; Pershing et al., 2008; Phillips & Phillips, 2007a; Rummler & Brache, 1995). Existing literature shows that organizations typically focus on simply changing the characteristics of evaluation (or business process) design and service delivery, without fully assessing the impacts, risks, benefits of measurement strategies upon other parts of the organization (Chakravorty, 2010; Moynihan, 1997). In addition, ROI implementation is often conducted as a “quick fix” to problems or an immediate response to crisis. This approach impedes efforts to influence a dominant culture or to integrate a strategic and comprehensive measurement system into a larger strategic planning process (Burkett, 2008; Cox, 2001; Kotter, 1996; Mayeno, 2007; Nadler & Tushman, 1997; Pershing et al., 2008; Phillips, 1998; Phillips & Ekeles, 2007).

Herold and Fedor (2008) argue the need for contextual analysis as part of routine change implementation. They contend organizations often operate in highly competitive political environments and that change leaders must fully consider the cascading subchanges, potential bottlenecks, and key demands placed upon various downstream leaders and their incumbents, as well as their capacity to meet new demands, when defining the business case for a change effort. To that end, organizational leaders that simply focus on implementation of the ROI Methodology™ without a systems view of confounding contextual factors, will risk a decline in productivity, a reduction in employee engagement and organizational commitment, and a decrease in profitability (Amble, 2010; Herold et al., 2007; Sobkowiak & LeBleau, 1996). Stream analysis theory (Porras, 1987) reinforces the concept that the organizational environment (ie. culture,

leadership, climate, work setting) plays a key role in determining individual members' change adoption and adaptability.

Contextual analysis is needed to inform strategy and execution when diagnosing change-driven business problems, selecting change strategies, attempting to overcome barriers to change, and identifying the skills necessary to manage change (Carleton & Stevens, 2004). Ultimately, sustainable ROI process implementation, in any setting by any function, must be contemplated by leaders with a long-range systems view of the business context in which the evaluation Methodology™ is meant to function. A systemic, contextual view means taking into consideration the larger internal and external “ecosystem” of customers, products, processes, technology, resources, reward systems, and organizational structures that comprise the basic “skeleton” and functional boundaries and inter-connections of any organization (Rummler & Brache, 1995).

Capacity, Capability, and Readiness Factors

Change management capacity and capability vary greatly from one organization to another. Even organizations that experience constant change do not necessarily have this as a core competency. Organizational change research suggest that many variables influence the capacity with which organizations can accommodate and internalize a complex change, with one predominant factor being the initial readiness of an organization and its employees (Adams et al., 1976; Anderson & Anderson, 2001; Armenakis et al., 1993; Jaffe & Scott, 1999).

Research shows that organizational members' beliefs, attitudes, assumptions, and intentions regarding the extent to which changes are needed and the organization's capacity to successfully make those changes significantly effect change readiness

(Anderson & Anderson, 2001; Cameron & Green, 2004; Herold et al., 2007; Thibault & Kelley, 1952). According to field theory (Lewin, 1951) organizational processes are human processes, organizations are governed by human activity, and human activity is heavily influenced by the mindset of individuals. Once a change is introduced, both the content (what is being done) as well as the process (how it's being done) quickly shape individuals' beliefs about what is happening and the amount of exertion needed on behalf of or against the effort. Individuals' beliefs about change issues, their impact, and their causes are very different, even when there appears to be agreement on the surface. In many organizations, there is also a disjuncture between the assumptions about vision, values, and organizational priorities and actual practice. In these situations, the perceived incongruence between the explicit assumptions and organizational practice may be a restraining or resisting force for change (Mayeno, 2007; Nadler & Tushman, 1997; Thibault & Kelley, 1952).

The psychodynamic impact of introducing and implementing a change process is often overlooked by change leaders, including those responsible for championing the ROI Methodology™ (Herold et al., 2007). Noer's (1993) research supports this concept and suggests that organizational leaders must address immediate change response issues -- including individuals' emotional concerns about change impact -- before it can move to a future-focus of embedding and sustaining changes at an organizational level. Within this conceptual framework, sustainable interventions require a whole system, contextual perspective characterized by "psychological contracts" between leaders and followers, aligned systems, processes, and practices, and leadership behaviors that enact and embody the new or desired culture and values (Hailey & Balogun, 2002; Noer, 1993;

Tesoro, 1998).

Many researchers contend that resistance to change should be expected and planned for when implementing a significant change process or project (Adams et al., 1976; Biech, 2007; Burke, 1994). Resistance may be overt or subtle and is generally attributed to four factors: parochial self-interest (seeking to preserve the status quo); misunderstanding and lack of trust; contradictory assessments and low tolerance for change (Anderson & Anderson, 2001; Appleby & Tempest, 2006; Bedeian, 2004; Cameron, & Green, 2004; Hailey & Balogun, 2002; Herold & Fedor, 2008; Weinberg, 1997).

Other researchers challenge prevailing wisdom about change resistance. Herold and Fedor (2008) argue that the concept of resistance implies negative attitudes, a “deficit mentality”, sabotage, and volitional anti-change behavior. While there may certainly be motivational issues evident with some individuals, Herold and Fedor (2008) contend that much so-called resistance can be attributed to performance anxiety about *learning readiness* and that leaders need to better manage the adaptation process by providing more training, removing environmental barriers, providing appropriate resource support, and/or improving incentives and consequences for meeting performance goals. This includes having realistic expectations of performance projections and consequences once a change is introduced. In fact, a research study about factors affecting supervised performance showed that less than 1% of all organizational performance issues are due to lack of capability by individual performers (Broad & Burkett, 2007; Rummier & Brach, 1995).

Herold and Fedor's research showed that early training, addition of extra staff, and/or "good change management practices" (i.e. cascading concurrent changes with a staged approach), minimized the depth and duration of performance declines and yielded quicker performance recovery during a major change implementation. Other performance support interventions such as improved tools, trouble-shooting, and ongoing coaching, led to similar results. The choice of interventions is contingent upon organizational resources available.

Schein (1990) supports the theory that "learning anxiety" is a typical response to change pressure. Pressures for immediate compliance and conformance with new performance demands only serves to reinforce individuals' anxiety and preferences for preserving the status quo (French & Bell, 1995; Hailey & Balgun, 2002; Herold et al., 2007). Learning anxiety can be reduced if a) individual members (managers and staff) know in detail what they are expected to do and how they are expected to perform, and b) managers acknowledge that learning something new usually involves a temporary dip in performance. Research shows that there are inevitable performance declines associated with the introduction of new processes or procedures and that complex, transformational change is best represented by a flat curve requiring sustained effort over a period of years rather than a steep curve, requiring a year of concentrated effort (Cox, 2001). Leaders play a key role in providing motivational boosts or detriments that serve to shorten or lengthen learning curves and the duration of performance recovery. Research shows that both leaders and followers agree that a leaders' capacity to assess change progress during a major implementation, and to support and sustain efforts post-implementation, is a prevalent area of limitation that impedes change success and exhausts critical resources

(Herold & Fedor, 2008).

Performance anxiety and performance decline among HRD professionals and stakeholders is a common change response when the ROI Methodology™ is implemented as a new standard for organizational accountability and a new practice for evaluation operations (Phillips et al., 2006; Phillips & Phillips, 2007a). A case study describing the role of ROI process implementation in a high performance learning organization highlighted these issues. Specifically, the authors stated that team members' "frustration [with] our own inexperience with ROI and the incorporation of ROI projects into busy schedules" posed the biggest challenges to promoting the ROI Methodology™ as an evidence-based, "system-wide philosophy" (Stamp et al., 1998, p. 75-76).

Change Turbulence Factors

Research shows that readiness and change tolerance declines in proportion to the degree of perceived chaos in the internal and external environment and the degree of change turbulence experienced by individuals in an organization (Herold & Fedor, 2008). Change turbulence is described as the internal volatility experienced by organizational members in response to the frequency and severity of other changes going on in the organization (Herold & Fedor, 2008). Research shows that this type of change turbulence has a significant impact on individuals' change capacity and motivation (Adams et al., 1976; Bamberger et al., 2006; Biech, 2007; Isaakson & Hallencreutz, 2008). Considering that organizations typically interrupt performance recovery from "Change 1" by the introduction of "Change 2" and then another "Change 3" (Herold & Fedor, 2008), it is not surprising that individuals often experience stress, frustration, and "shell shock" with not being able to focus on a given change before being distracted by another. Each

change demands the exertion of physical, emotional, and cognitive resources, and as these resources get diverted to other efforts, they are then unavailable for application to previous changes, thus prolonging the performance recovery and realization of performance improvements (Bridges, 1991; French & Bell, 1995; Herold & Fedor, 2008; Nadler & Tushman, 1997; Prochaska et al., 1997).

Field theory identifies and analyzes driving and restraining forces in the environment that propel an organization towards, or away, from a desired change. In this construct, these forces are in play at all time and organizational stability is not maintained by a lack of conflict, but rather through the equilibrium of opposing forces of change and resistance. Change occurs when the driving forces become stronger than the restraining forces, resulting in an “unfreezing” of the status quo that allows movement (Lewin, 1951). One of the key tasks of leaders and change agents seeking to internalize the ROI Methodology™ is to ensure that the pace of organizational change does not compromise the integrity of the ROI process model because periods of stability rarely occur (Burkett, 2008; Herold et al., 2007; Phillips et al., 2006; Phillips & Tush, 2008). Research shows that acknowledging and addressing change dynamics as a continuous facet of organizational life builds change capacity and organizational resiliency. Some argue that all projects are change projects (Van Sylke, 2009). In addition, a change process perspective, coupled with applied change process methods, has been shown to build evaluation capacity while enhancing the sustainability of a complex change effort like ROI process implementation (Armenakis et al., 1993; Cloete, 2005; Herold & Fedor, 2008; Kusek & Rist, 2004; Phillips et al., 2006; Prochaska et al., 2001).

Summary

As the need for accountability and demonstrable results with HRD practice has grown, so have the uses and applications for results-based M & E systems like the ROI Methodology™. To be effective and sustainable, the ROI Methodology™ must be responsive to changing business contexts and the diverse needs of its users and must repeatedly assess the capacities of those who will both produce and use results-based data (Bell & Morse, 2001; Callahan & Kloby, 2009; Henriques, 2004; Isakkson & Hallencreutz, 2008; Kusek & Rist, 2004; Phillips & Tush, 2008; Wallace, 2001).

The literature identifies multiple factors associated with change implementation success, evaluation capacity building, and sustainability of the ROI Methodology™, including: credible leadership; internal support from key executives and stakeholders; contextualized implementation planning; alignment (congruence) with business culture and strategy; clear roles and responsibilities; resource allocation; performance support; individual and organizational capacity, and change readiness (Bamberger et al., 2006; Hailey & Balogun, 2002; Kusek & Rist, 2004; Mourier & Smith, 2001; Phillips & Ekeles, 2007; Phillips et al., 2006; Thibault & Kelley, 1952). This study examines the association of these factors with the degree of sustainable ROI process implementation in order to inform evaluation theory and practice.

Chapter III reviews the quantitative and qualitative research questions and the methodology for conducting the study to examine these questions. It is organized around such topics as: a) research design; b) population and sample; c) instrumentation; d) variables for the study; e) validity and reliability; f) data collection; and e) data analysis procedures.

CHAPTER III

RESEARCH DESIGN AND METHODOLOGY

Introduction

The objective of this study is to identify and explore characteristics of sustainable ROI process implementation in HRD practice with organizations that have had experience implementing the ROI Methodology™. The demand for results-based measures of HRD effectiveness, up to and including return on investment, has steadily increased in both the public and private sector. While there are various approaches to evaluating the business value of workplace learning programs, the ROI Methodology™ is one of the most credible and widely used evaluation systems in the world. Despite its prevalent use, however, sustainability of the ROI process model is an aspect of implementation that is often overlooked and under-estimated (Phillips et al., 2006; Phillips & Phillips, 2007b). A sustainable system is based upon the idea of institutional and functional durability and, as such, requires an implementation focus that regards building and sustaining a result-based measurement system as a long-term versus an episodic process. Yet studies show that many organizations implement results based measurement systems (including the ROI Methodology™) with a short-term, activity-based focus and neglect to create the holistic processes, tools, and change capabilities needed to successfully sustain the system over time (Anderson & Anderson, 2001; Bamberger et al., 2006; Cloete, 2005; Kusek & Rist, 2004; Phillips, 1998; Wallace, 2001).

In addition, ROI process implementation has tended to focus on content and technical dimensions of “getting the process right”, with too little emphasis on assessing

the organizational, political, and cultural contexts – including change turbulence -- in which the measurement and evaluation system is meant to function (Bamberger et al., 2006; Hailey & Balogun, 2002; Rouiller & Goldstein, 1993). Research shows that leaders and followers agree that a leaders' capacity to assess change progress during a major implementation, and to sustain efforts post-implementation, is a prevalent area of limitation that impedes change success and exhausts critical resources (Herold & Fedor, 2008). While there is no best way to ensure that a change initiative like the ROI Methodology™ will be successfully embedded into organizational life, recognition of the contextual variables associated with sustainable implementation can help organizations target interventions and resources to those leverage points that will have the greatest influence on its long term adaptability and utility as a decision making tool.

Problem and Purpose Overview

The objective of this study is to identify and explore characteristics of sustainable ROI process implementation in HRD practice with organizations that have had experience implementing the ROI Methodology™. The central premise of this sequential, mixed method study (Creswell, 2003) is that differences in sustainable ROI process implementation are associated with an organization's degree of change response and capacity. This premise has some support in the literature, but requires further empirical validation.

To that end, statistical analysis was used in phase one to present a broad context for assessing possible explanations of the sustainability issue. Specifically, statistical analysis was used to: a) measure the relationship between sustainable ROI process implementation and use of a planned change process in implementation; b) determine if

Context, Capacity, Capability, and Change Process factors can statistically predict the degree of sustainability with the ROI Methodology™; c) describe characteristics of sustainable ROI process implementation, including success factors and barriers to sustainability; and d) measure the association between the degree of sustainability with ROI process implementation and the number of barriers associated with ROI process implementation.

Following this macro-level analysis, phase two used qualitative, telephone interview methods to better understand the dynamics of specific organizations that have successfully implemented and sustained the ROI Methodology™ for a period of three years or longer. The conceptual, theoretical framework presented in Figure 1.2 guided research questions in both quantitative and qualitative phases of research.

Purpose and Overview of the Mixed Methods Research Design

The purpose of using a mixed method research design for this study is that both qualitative and quantitative research, in combination, provide a better understanding of a research problem or issue than either research approach alone (Creswell & Plano Clark, 2007). Specifically, in a typical sequential, mixed method study, qualitative data is used to assist in explaining and interpreting quantitative findings, particularly those that may be unexpected. In addition, a mixed method approach serves to: a) combine comprehensive coverage with an in-depth analysis of individual cases and a holistic understanding of the contexts within which sustainable implementation occurs; b) strengthen validity; c) extend the comprehensiveness of findings; d) generate new insights; and e) incorporate a wider diversity of values (Bamberger et al., 2006; O’Cathain, Murphy, & Nicholl, 2008; Tashakkori & Creswell, 2007).

A common factor in the use of a mixed method study is the choice of priority or weight given to quantitative and qualitative data collection and analysis. The priority may be equal or skewed towards giving higher priority to either the quantitative and qualitative approach. Another factor in mixed method research is related to the integration of quantitative and qualitative data. Integration can occur at various stages of research including data collection, data analysis, interpretation, or some combination. The place in the process where integration occurs is related to whether phases (a sequence) or a single phase (concurrent) phase of data collection is chosen (Crewsell, 2003; Tashakkori & Creswell, 2007).

As shown in Figure 3.1, both quantitative (QUAN) and qualitative (QUAL) stages of data collection and data analysis in this study were given equal priority and integration occurred at the data analysis and interpretation phase, where qualitative findings expanded upon or explained qualitative data sets to present a fuller, more elaborate picture of sustainable ROI implementation HRD practice (Crabtree & Miller, 1999; Creswell, 2003).

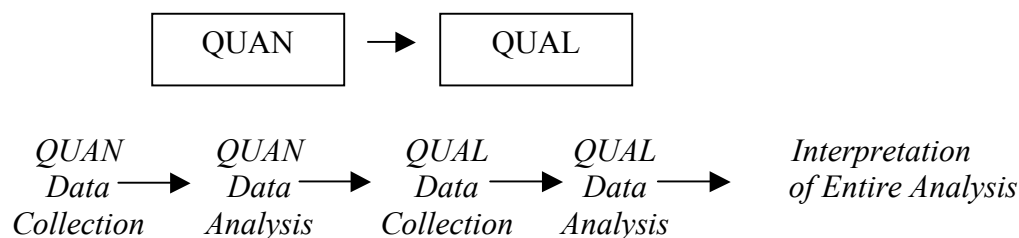


Figure 3.1. Sequential Exploratory Design. Adapted from “Research Design, Qualitative, Quantitative, & Mixed Methods Approaches,” by J. W. Creswell, 2003.

Research Objectives

In keeping with Woolley's (2008) recommendations for selecting a mixed method approach, the research design was driven by the research objectives. Specifically, the rationale for a mixed method study here focused upon the need to "better understand" and explore the phenomenon of sustainable ROI implementation in HRD practice by expanding upon quantitative findings with in-depth qualitative interviews.

Based on the current literature and research focused upon successful change implementation and evaluation capacity building, the following research objectives were tested and addressed by linking quantitative and qualitative data collection and analysis:

- O₁: Compare the association of sustainable ROI process implementation and the associated degree to which a planned change process is applied to implementation.
- O₂: Compare the impact of Context, Capacity, Capability, and Change Process factors upon the degree of ROI Methodology™ sustainability.
- O₃: Describe characteristics of sustainable ROI process implementation.
- O₄: Compare the association of sustainable ROI process implementation and the number of barriers associated with ROI process implementation.

Population and Sample

In keeping with Yukl's (2002) assertion that the purpose of the research should dictate the methodology and choice of samples, the sample population examined in this research was drawn from organizations in the ROI Institute data base that have implemented the ROI Methodology™. Specifically, the population for this project is public and private sector organizations located in the US that have offered ROI

Methodology™ training to its employees. As of July 2009, the ROI Institute database listed a total of 4,000 organizational members who have participated in some form of education and training around the ROI Methodology™ from the ROI Institute since its inception. Of the total 4,000 individuals, 2,390 have achieved certification in the ROI Methodology™ and/or completed certification training. These professionals represent directors, managers, professionals, consultants, specialists, instructional designers, trainers and vendors in the training, HRD, organization development, or performance improvement field. For purposes of this study, research focused on the population that encompass individuals who have achieved, or who are in the process of achieving, ROI certification. Organizational and individual investment in certification is considered indicative of a commitment to implement and sustain the ROI Methodology™ within a sponsoring agency. In addition, the sample included those individuals who may not be certified but who demonstrate commitment to the ROI Methodology™ by virtue of active involvement in the ROI Institute SharePoint Community of Practice, which is accessible only to participants of the ROI Certification process.

After eliminating incomplete addresses and those individuals who may have successfully implemented and sustained the ROI Methodology™, but who were unavailable to respond because they were no longer with the organization listed in the database, a population size of 629 remained. In keeping with appropriate sample sizes for small to medium populations, sample size was targeted at 277 with a 44% response rate.

For the qualitative research phase, 21 individuals from the available population were purposively selected to participate. Given that professionals who attempt to implement and sustain the ROI Methodology™ in an international environment may

experience unique contextual issues, cultural challenges, or constraints, individuals responsible for ROI implementation in organizations outside of the US will be eliminated. Subsequently, individuals were selected for telephone interviews based upon their individual and/or organizations' maturity level with the ROI Methodology™, as reported in the quantitative phase of research. The criteria for maturity level consisted of those individuals or organizations with three or more years implementation and internalization experience with the ROI Methodology™. Selection criteria also purposively included those individuals known to have three or more years implementation experience with the ROI process model, but who may no longer be affiliated with organizations that have the same level of maturity with implementation. Using convenience sampling, it was determined that a sample size of 21 allowed the needed balance between gathering the data necessary to identify characteristics and the amount of time to conduct and analyze the interviews. Data saturation, a time when no significant or new information emerged, informed decisions about final sample size. The results from each research phase are reported as a group.

Data Collection and Instrumentation

Quantitative Research Design

Research design frequently uses surveys for descriptive purposes. Surveys are also useful, to some degree, for interpretive purposes. The survey instrument serving as the basis for quantitative data collection is adapted from a composite of training evaluation, performance improvement, and organizational change surveys used in similar research. These include: *Training Evaluation in Public Sector Organizations* (Phillips, 2003); *Conquering Organizational Change* (Mourier & Smith, 2001); *A Tool for*

Assessing Organizational Readiness (Fuller, 1997); *Organizational Capacity Assessment* (Colorado Trust, 2000); and *Assessing Performance-Based Monitoring and Evaluation Capacity* (Kusek & Rist, 2004). Each of these surveys assess similar dimensions of organizational capacity, change capacity, and implementation planning --including governance, leadership, human and financial resources, service delivery, evaluation and organizational learning -- that are cited in the literature. The quantitative survey in shown in Appendix C.

Modifications were made to distinguish the ROI Methodology™ as the comprehensive evaluation system and implementation under investigation. Sections A and B were developed to determine participants' perceptions about enablers and barriers regarding sustainable ROI implementation. Section C was developed to determine participants' perceptions about sustainable ROI implementation as a major change process and to identify overall patterns in the application of planned change processes within participants' organizations. Section D was designed to collect information about the maturity level of participants' ROI implementation and to examine the extent to which implementation progress reflected sustainability indicators identified in the literature. Demographic information was captured in Section E and was modified to include both public and private sector organizations, titles, functions. In addition, terminology was modified to reflect the variables used in this research.

Pilot testing a survey instrument is considered a necessary and helpful aspect of all survey research and development (Litwin, 2003). A pilot test with ten ROI professionals was conducted in order to determine any errors in the survey form, assess

the survey flow, refine questions, and determine the appropriate length of the questionnaire (Litwin, 2003; Bourque & Fielder, 2003).

Variables for the Study

Independent variables for the quantitative phase of this study were grouped into composite clusters representing dimensions of change capacity. These clusters include:

1. Context (culture, leadership, incentives, change history, change perspective, change turbulence, congruence of change effort with culture, risk tolerance)
2. Capacity (energy, readiness, attitudes, perceptions, motivation, beliefs)
3. Capability (aptitude, skills, knowledge, attributes, resources)
4. Change Process (change process content, contextual analysis, and process)

The independent variables represent those variables identified in the literature as being associated with the success of implementing an organizational change initiative and with the long-term success of a results-based evaluation methodology as a specific type of change effort. They will be used to predict the dependent variable, which is degree of sustainability with the ROI Methodology™.

Table 3.1 shows the questionnaire items that were used to measure the independent and dependent variables associated with each Research Objective. Dependent variables reflect characteristics associated with sustainable ROI implementation. Independent variables were tested to determine if a positive or negative relationship exists between it and the characteristics of sustainable ROI Methodology™ implementation.

Table 3.1

Variables in the Quantitative Phase of the Study

Research Objective	Variable	Questionnaire Items Associated with the Variable
1	Planned Change Process	A4 (b-g); C9 (a-h, j-l)
1	Sustainability	E12; E13; E15; E16; E18; E19 (a-k)
2	Context	A1 (a-k)
2	Capability	A2 (a-g)
2	Capacity	A3 (a-d)
2	Planned Change Process	A4 (b-g); C9 (a-h,j-l)
2	Sustainability	E12; E13; E15; E16; E18; E19 (a-k)
3	Characteristics	A1 (a-k); A2 (a-g); A3 (a-d); A4 (a-f); E20 (a-g)
4	Barriers	A4f; B5 (b-k); B6 (a-h); B7 (a-d); B8 (a-f); C9(i)
4	Sustainability	E12; E13; E15; E16; E18; E19 (a-k)

Qualitative Research Design

Qualitative research has its roots in cultural anthropology and American sociology and has only recently been adopted by educational researchers as an investigative process (Creswell, 2003; Strauss & Corbin, 1998). The intent of qualitative research is to help understand a specific social situation, phenomenon, event, role, group, or interaction. The purpose of using a qualitative research design in this study was to understand, compare, and contrast the phenomenon of sustainable ROI implementation through the perspective and experience of participants who have applied the Methodology™ in their natural work

setting. In addition, qualitative research findings were analyzed and interpreted to expand upon quantitative findings for the purpose of understanding and connecting, not one, but multiple realities as data emerged (Lincoln & Guba, 2000; Tashakkori & Creswell, 2007).

A semi-structured telephone interview was used to collect data about the meanings, interpretations, and everyday experiences of participants in relation to ROI implementation and sustainability. This information extended the comprehensiveness of findings from phase one of the research with an in-depth analysis of individual cases where sustainable ROI implementation occurred (Lincoln & Guba, 2000).

Because telephone interviews and questionnaires are usually more complex and tailored to respondents than mailed or self-administered surveys, the length of the interview can vary substantially among respondents. Therefore, a pilot test with three ROI professionals was conducted in order to identify any errors in the survey form, refine the interview process, and determine the approximate length of each interview (Litwin, 2003). Pilot testing determined the actual length of each interview, which ranged between 45 to 60 minutes. This amount of time enabled in-depth discussion, guided by main and probing questions (Patton, 2002), which is an approach well documented in the literature (Bourque & Fielder, 2003; Denzin & Lincoln, 2000). The interview questions and their purpose are outlined in Table 3.2.

Question 1 addresses participants' roles and responsibilities relative to ROI process implementation. Questions 2 focuses upon identifying the maturity level of ROI process implementation and sustainability, based upon years of utilizing the

Table 3.2

Interview Questions and Their Purpose

Interview Protocol Question	Purpose
1. First, can you tell me about your current role with regard to implementing the ROI Methodology™?	To determine professionals' practice maturity with the ROI Methodology™.
2. How long have you and/or your organization been applying the ROI Methodology™?	To determine the organizational maturity level of the ROI process.
3. What conditions led your organization, or your client organizations (on average), to first implement the ROI Methodology?	Open-ended question to uncover perceived internal/external drivers, vision, and context for ROI Methodology.
4. How was the initial implementation effort sponsored and how is ongoing sponsorship of the ROI process handled now, in your organization, or your client organizations on average?	To discover perceived degree of sponsorship, as related to a factor of sustainability cited in the literature review.
5. Please give me an example that best describes how the ROI Methodology™ is viewed by stakeholders or decision makers in your organization, or your client organizations on average?	To determine degree of utility, demand, governance.
6. How would you describe the organizational climate or culture in which the ROI Methodology™ typically functions in your organization or your client organizations on average?	To probe for contextual factors that influence the environment in which the ROI Methodology must function.
7. This study focuses on describing characteristics of sustainable ROI implementation. From your experience as an evaluation professional, how would you describe the characteristics of sustainable ROI implementation?	To test Research Objective Three.

Interview Protocol Question - <i>Continued</i>	Purpose
8. What factors do you think have contributed most to your organization's success in sustaining the ROI Methodology™ over time?	To uncover perceived success factors or enablers to sustainability and compare to factors cited in literature review.
9. From your experience, what have been the biggest organizational barriers to sustaining the ROI Methodology™?	To uncover perceived barriers to sustainability and compare to factors cited in literature review.
10. What kind of change management issues, if any, have you experienced in your implementation efforts to maintain and sustain a comprehensive measurement system like the ROI Methodology™?	To test the first Research Objective and examine the first research question.
11. Briefly describe how your organization (or your client organizations, on average) typically responds to competing or conflicting demands that may detract from or oppose resource allocations for continued use of the ROI Methodology™.	To determine change response patterns, implementation risk planning patterns, and organizational/leadership/project managers' response to ROI implementation constraints.
12. Have you or your organization ever conducted a study or an impact analysis on the "ROI of the ROI" to quantify the organizational value of the Methodology™? a. If not, why not? b. If yes, please describe briefly.	To identify how overall value of the Methodology™ is defined in quantitative versus subjective terms.
13. From your perspective as an evaluation professional, what are the future research and development needs in the field of evaluation and ROI?	To identify areas for further evaluation research. To uncover perceived research or development gaps in evaluation theory and practice.
14. Is there anything else you'd like to share about your experience with ROI process implementation?	Open-ended question to solicit any additional information.

Methodology™, within participants' respective organizations. Question 3 and Question 4 explore the context in which the initial implementation occurred, including business drivers for results and the past and current role of sponsorship. Questions 5 probe for participants' perceptions about the current status of ROI within the organization in terms of sustainability indicators such as governance, system alignment, ownership, utility, demand, and/or accessibility. Question 6 explores individuals' perceptions about the internal, environmental context in which the ROI Methodology™ is intended to function and identifies the degree to which environments are described as turbulent or characterized by perpetual change. Question 7 explores a key theme of this research study by probing for participants' perspective about sustainability characteristics or indicators as compared to literature review. Questions 8 and 9 focus on perceived enablers and barriers related to sustainability of the ROI Methodology™. Question 10 explores the extent to which participants identify change management issues relative to effective and sustainable ROI process implementation. Question 11 explores the degree to which organizations utilize a planned process to mitigate risks and contend with restraining forces that might impede integration of the ROI process model. Question 12 assesses the degree to which organizations have quantified the organizational value of the ROI Methodology™ process, or its utilization, through systematic study or review. Question 13 probes for participants' perceptions of development needs or gaps relative to measurement and evaluation research, theory, and practice. Question 14 is an open-ended question allowing participants to reflect upon any other issue or factor related to their implementation experience with the ROI Methodology™ that might not be covered in the interview. Open-ended questions are considered essential to survey design since

participants need an opportunity to express thoughts or opinions in their own words (Fink, 2003).

Validity and Reliability

Effective instruments include characteristics of validity and reliability. The extent to which an interview instrument measures what it is intended to measure is known as validity. Testing an instrument for validity can be comprehensive and labor intensive. Deciding on tests of validity, therefore, are typically dictated by time and cost issues (Phillips, 1997b; Rossi et al., 1999) There are many methods for establishing validity, including face validity, content validity, construct validity, and predictive validity (Scriven, 1991). Face validity occurs when users of the measure accept it as a valid indicator of the concept underlying the question. When the measure or instrument represents the content of the research, it is considered to have content validity. Because the characteristics of sustainability explored in both the survey and interview questions replicate factors found in previous research, some level of content validity exists. Face validity criteria are met because the measures identified for the research are found in the research literature.

To further support the face validity of both the quantitative and qualitative data collection instruments, a group of five ROI professionals with extensive subject matter expertise and implementation experience served as Peer Examiners. Dr. Jack Phillips, founder of the ROI Methodology™, was asked to be one of the five content experts and examiners (Creswell, 2003). The role of the Peer Examiners was to review the survey and interview instruments, respectively, and to rate questionnaire items based upon their relevance to the research questions (Hill, 1999). Suggestions for improvement included

eliminating redundant questions, clarifying ambiguous or unclear instructions for answering questions, clarifying definitions of terms, and minor spelling edits. In addition, a member checking approach, where participants confirm interpretations and meanings during data analysis, was used during the qualitative interview process to ensure the accuracy, value, and validity of data (Creswell, 2003).

A Cronbach's alpha test was used to test the reliability of the survey instrument. The alpha provides a coefficient to estimate consistency of scores on an instrument and can be considered an adequate index of the inter-item consistency reliability of independent and dependent variables (Sekaran, 1992). Nunnally (1978) indicates that a 0.7 is an acceptable reliability coefficient. The reliability estimate was only calculated for survey items measured on a Likert scale (Creswell, 2003).

Data Collection Procedures

Quantitative Research

Dillman's Tailored Design Method (2000) served as the basis for the data collection strategy in the first phase of research. The premise of this approach is that data collection implementation has a greater effect on response rates than the survey instrument itself. To that end, a pre-notice email on ROI Institute letterhead was sent to all potential respondents by Dr. Jack Phillips, founder of the ROI Methodology™ and Chairman of the ROI Institute, Inc. This announcement promoted the significance of the research to the field of evaluation and measurement, personally invited respondents' participation and input, and informed recipients that they would be receiving a follow message from the researcher with more details about the study and their role as a

potential participant. The pre-notice letter, shown in Appendix B, included a link to the electronic survey, which the researcher placed online through Survey Monkey.

The researcher then sent a follow up email, with another link to the electronic survey instrument, three days after the pre-notice letter initiated by Dr. Jack Phillips. The follow up email to potential respondents is shown in Appendix D. Participants were given a two week window to complete the survey after the second email was distributed. During the two week time frame, the researcher monitored the Survey Monkey website daily to collect raw data and determine response rate.

A final follow up invitation to participate, with another link to the electronic survey instrument, was forwarded by email to solicit responses from those who had not yet responded to initial invitations. This message included a notice that this would be the final attempt to solicit feedback, as shown in Appendix E.

Dillman (2000) also suggests that return rates can be enhanced with the use of incentives. To ensure a higher response rate, the first 200 respondents to return their questionnaire were offered the ASTD publication *Beyond Learning Objectives* (2008) by Jack and Patti Phillips. This book is relevant to the research topic and has proven to be of interest to HRD professionals in public and private sector organizations. A letter thanking respondents for their participation was included in the incentive package. Finally, an additional incentive involved offering respondents a summary of research results.

Qualitative Research

Data was collected from February 2009 through April 2010. The data collection process for this phase of research replicated aspects of the data collection procedures

used in phase one. Specifically, a pre-notice email on ROI Institute letterhead was sent to select interviewees by Dr. Jack Phillips, founder of the ROI Methodology™ and Chairman of the ROI Institute. This announcement promoted the significance of the research to the field of evaluation and measurement, personally invited respondents' participation and input, and informed recipients that they would be receiving a follow message from the researcher with more details about the study and their role as potential participants. The pre-notice letter is shown in Appendix F.

The researcher forwarded a follow up email invitation to participate within three days of the pre-notice letter initiated by Dr. Jack Phillips. The follow up email, shown in Appendix G, included two meeting date options for the telephone interview and informed respondents that they would be contacted shortly to select a convenient date and time. A follow up phone call was conducted with those individuals who did not respond to the invitation within 10 days of the original email.

Once an individual elected to participate, an Informed Consent Form (Appendix H) was distributed prior to the interview. The purpose of this form was to ensure that participants understood that their participation was voluntary and that their names and the names of their organizations would be kept confidential and remain anonymous.

Interviews were scheduled at a mutually agreeable time. AudioAcrobat® technology was used to record each telephone interview session. AudioAcrobat® provides unique technology that records high quality audios anywhere from a telephone or a computer where there is access to the World Wide Web. Interview recordings were

downloaded as MP3 audio files which were burned to a CD or provided to a transcriptionist.

In keeping with Creswell's (2003) recommendations for qualitative research procedures, an interview protocol for collecting and recording information was applied. The interview protocol includes key research questions, shown in Table 3.2, which were applied uniformly to each session. This is an approach well documented in the literature (Creswell, 2003; Denzin & Lincoln, 2000). At the start of each interview, I introduced myself, briefly reviewed the Interview Consent form, described the study, and asked if the interviewee had questions prior to recording the call. Permission was asked to record each interview. In addition, notes were also taken during the call. A semi-structured interview protocol, with the use of probing questions, allowed facilitated exploration of the sustainability issue. It also allowed some control and consistency over the line of questioning in order to compare findings across all interviews. The nature and content of probing questions in the qualitative phase of research were partially informed by survey responses obtained during phase one. In particular, targeted probing questions were included in order to clarify and expand upon influencing factors identified in quantitative survey responses, such as: enabling factors such as formal evaluation education, training, certification, sponsorship support, and organizational maturity; and sustainability barriers, including the influence of organizational change patterns upon leadership focus, implementation roles, and resource allocation;

Immediately after the interview, field notes were reviewed to document reactions, impressions, and observations. Initial ideas or themes that surfaced from field notes were chronicled, as suggested by Merriam (1998). In addition, links to the audio recording of

each completed interview was submitted to a transcriptionist, who signed a confidentiality agreement shown in Appendix I. Once the transcript of the interview was received, factors and patterns related to sustainability were identified, grouped into themes, concepts, and categories, and coded using specific steps in qualitative research design (Creswell, 2003).

Following final analysis of emergent themes and issues, individuals who participated in the telephone interview received a summary of their comments and an overview of any quotes or perspectives derived from their input. Participants were given an opportunity to approve, refine, or edit comments, quotes, or perspectives prior to its inclusion in the research data. To protect anonymity, each participant was given a pseudonym in the final summary of results. Upon dissertation approval, a written summary of results was provided to all participants.

Data Analysis Procedures

Quantitative Analysis

The first phase of this sequential, mixed method research (Creswell, 2003) used SPSS Standard Version Release 16 to conduct data analysis. Statistical procedures included the use of frequencies and percentages, correlations, and a Multiple Linear Regression. Four research objectives were tested and addressed by linking quantitative and qualitative data collection and analysis.

Research Objective One states that the degree of sustainable ROI process implementation is associated with the degree in which a planned change process is applied to ROI implementation. Here, a correlation was used to determine the relationship between the frequency with which a planned change process is used in ROI

process implementation and the degree of sustainable ROI process implementation. The findings were compared to dimensions of change process application described in organizational change literature (Anderson & Anderson, 2001; Appleby & Tempest, 2006). Table 3.1 shows the breakdown of survey questions reflecting the composite of variables representing planned Change Process factors and the composite of variables representing sustainability factors.

Research Objective Two states that Context, Capacity, Capability, and Change Process factors, as reflected in a composite cluster of variables representing dimensions of change capacity identified in the literature, can statistically predict the degree of sustainable ROI process implementation (Herold & Fedor, 2008; Kusek and Rist, 2004; Mourier & Smith, 2001; Phillips, 2007a). This Research Objective was tested by using a Multiple Linear Regression. The dependent variable is the degree of sustainable ROI process implementation. Table 3.1 shows the breakdown of survey questions that reflect the composite of variables representing Context, Capacity, Capability, Change Process factors and the composite of variables representing sustainability factors.

Research Objective Three describes characteristics of sustainable ROI process implementation. Frequencies and percentages associated with implementation success factors, implementation barriers, and implementation maturity factors were used to determine characteristics of sustainability. The findings were compared to characteristics of sustainable measurement and evaluation systems as described by Appleby and Tempest (2006), Anderson and Anderson (2001), Herold and Fedor (2008), Kusek and Rist (2004), and Mourier and Smith (2001). Table 3.1 shows the breakdown of survey

questions reflecting the composite of variables representing implementation barriers and the composite of variables representing sustainability factors.

Research Objective Four states that the degree of sustainability with ROI process implementation is associated with the number of barriers experienced during implementation. A correlation was used to determine if a relationship exists between the number of barriers associated with ROI process implementation and sustainability of implementation. Table 3.1 shows the breakdown of survey questions that reflect the composite of variables representing implementation barriers and the composite of variables representing sustainability factors.

Qualitative Analysis

In qualitative research, data collection and data analysis must be a simultaneous process (Creswell, 2003; Merriam, 1998). Throughout the data analysis process, emerging patterns and themes were organized categorically and chronologically, reviewed continuously, and coded.

After final editing of interview documents, specific research design steps were used to conduct data analysis and move deeper into an understanding and interpretation of the larger meaning of the data. These steps included: a) organizing and preparing the data for analysis; b) reading through all the data to obtain a general sense of the information and its overall meaning; and c) beginning detailed analysis with a coding process, which is the process of identifying themes in accounts and attaching labels (codes) to index them. Themes are features of participants' accounts or experiences that are seen as relevant to the research questions (Crabtree & Miller, 1999; Creswell, 2003; Strauss & Corbin, 1998).

Perceived factors related to relevant research questions about sustainability were first highlighted, grouped into themes, subthemes, and coded by the researcher. As a “complete-member-researcher” (coined by Adler and Adler as cited in Denzin & Lincoln 2000), the researcher is an accepted member of the study group and contributed personal experiences that added context and meaning to participant narratives and interview results (Denzin & Lincoln, 2000). In keeping with Fink’s (2003) suggestions for reliable coding, the researcher then re-coded the data a second time, five days after the initial analysis, in order to assure reliability and check for consistency. This allowed sufficient time for the coder to forget the first set of codes and not just automatically reproduce them. Content analysis included counting the frequency with which an idea or theme was repeated. After the data was coded a second time, the two sets of codes were compared for agreement. Once a coding system was established, the data was entered into a matrix format where data categories and counts were coded for each participant. This information was used to calculate the totals across all participants for each theme and factor. Frequency of combinations of themes were also analyzed.

While validity does not carry the same connotations in qualitative research that it does in quantitative research, steps were taken to determine whether the findings are accurate from the perspective of the researcher, the participant, and readers of the accounts. Per Creswell’s (2003) guidelines for confirming the accuracy, authenticity, and credibility of qualitative interview findings, the following procedures were used. First, two external auditors with qualitative research experience were engaged to confirm consistent patterns of meanings and relationships and check for researcher bias in the coding process. These individuals independently analyzed transcribed interview data for

key issues and recurrent themes using a coding matrix for thematic analysis. This input was then compared to issues and themes identified by the researcher.

Next, a peer debriefing process (Creswell, 2003) was used to review and ask questions regarding any area of disagreement or discrepancy around themes generated by the researcher and the external auditors. It was agreed that any negative or discrepant information that ran counter to identified themes would be included in the presentation of findings in order to enhance credibility of participant accounts (Creswell, 2003).

Finally, a member checking process (Creswell, 2003) was used to determine accuracy. Here, a high level summary of specific descriptions or themes was presented to participants for their assessment of accuracy.

Integration of Quantitative and Qualitative Research

As previously described, the process for integrating quantitative and qualitative research findings followed guidelines for a sequential mixed methods study presented by Creswell (2003). Specifically, integration refers to the “mixing” of quantitative and qualitative data and, in this study, occurred at the data analysis and interpretation stages of the research process. Per suggested guidelines, the study is organized to first describe phase one, quantitative data collection, analysis, and reporting, followed by a description of phase two, qualitative data collection, analysis, and reporting. Then, in the interpretation and conclusions phases of the study, a summary of how qualitative findings elaborated upon or confirmed qualitative results is provided.

Summary

The objective of this study is to identify and explore characteristics of sustainable ROI process implementation in HRD practice. The sample population was

purposely drawn from public and private sector organizations that have implemented the ROI Methodology™ in the U.S.

Research design consisted of a sequential, mixed methods study (Bamberger et al., 2006; Creswell, 2003) in which four research objectives were tested and addressed by linking quantitative and qualitative data collection and analysis. The survey instrument serving as the basis for quantitative data collection was adapted from a composite of surveys used in similar research and focused on identifying characteristics that enable or impede sustainable ROI Methodology™ implementation. In phase one of the research design, statistical analysis included frequencies and percentages, bivariate correlations, and Multiple Linear Regression. Phase two of this study used a qualitative, semi-structured telephone interview protocol to better understand the dynamics and common themes of specific organizations that have successfully implemented and sustained the ROI Methodology™ for a period of three years or longer. Specific qualitative research design steps were used to determine the accuracy, authenticity, and credibility of findings from the perspective of the researcher, the participant, and readers of the accounts.

CHAPTER IV

ANALYSIS OF DATA

Introduction

The objective of this study is to identify and explore characteristics of sustainable ROI process implementation in HRD practice with organizations that have had experience implementing the ROI Methodology™. Results from data analysis are organized to report findings from phase one and phase two of this sequential mixed method research study. The survey instrument serving as the basis for quantitative data collection was adapted from a composite of training evaluation, performance improvement, and organizational change surveys used in similar research. These include: *Training Evaluation in Public Sector Organizations* (Phillips, 2003); *Conquering Organizational Change* (Mourier & Smith, 2001); *A Tool for Assessing Organizational Readiness* (Fuller, 1997); *The Organizational Capacity Assessment* (Colorado Trust, 2000); and *Assessing Performance-Based Monitoring and Evaluation Capacity* (Kusek & Rist 2004). Each of these surveys assess similar dimensions of organizational capacity, change capacity, and implementation planning -- including governance, leadership, human and financial resources, service delivery, evaluation and organizational learning -- that are cited in the literature. The survey instrument was modified to distinguish the ROI Methodology™ as the comprehensive evaluation system and implementation under investigation and is shown in Appendix B.

Results of data analysis presented in this chapter provide evidence of the relationships between the variables defined in four research objectives tested in this study. This chapter presents the results of the tests. The following chapter presents a

discussion of findings around key research questions and integrates quantitative and qualitative analysis to draw conclusions, discuss implications, and make recommendations for further research and practice.

Organization of Data Analysis

In keeping with Creswell and Plano Clark's (2007) recommendations for reporting mixed method research findings, findings are presented and organized around the two distinct phases of this mixed method study. Specifically, data analysis in phase one is organized to present a broad context for analyzing key issues related to sustainable implementation of the ROI Methodology™. Statistical analysis of the survey instrument used for quantitative data collection in phase one included frequencies and percentages, bivariate correlations, and Multiple Linear Regression. SPSS Standard Version Release 16 was used to conduct data analysis.

Phase two data analysis is organized around findings from the qualitative, semi-structured telephone interview protocol used to better understand the dynamics of sustainable ROI process implementation from specific organizations and/or individuals with a history of sustainable ROI process implementation over a period of three years or longer.

Descriptive Characteristics of Respondents

Quantitative Research

The target population for this research project is public and private sector organizations in the U.S. that have offered ROI Methodology™ training to its employees. The sample population for this project was drawn from membership lists provided by the ROI Institute. These professionals represent directors, managers, professionals,

consultants, specialists, instructional designers, trainers and vendors in the training, HRD, organization development, or performance improvement field who have achieved, or who are in the process of achieving, ROI certification. In addition, the sample included those individuals who may not be certified but who demonstrate commitment to the ROI Methodology™ by virtue of active involvement in the ROI Institute SharePoint Community of Practice. Survey and potential telephone interview participants were also solicited from relevant and related LinkedIn communities of professional practice, such as the Workplace Learning and Performance Forum, ROI Institute, Sacramento ASTD, Certified Performance Technologists, Chief Learning Officer magazine, and Capella University - Training and Performance Improvement Specialty groups.

The web-based survey in Appendix B was offered to 780 HRD practitioners, consultants, and evaluation professionals. Undeliverable invitations to participate and incomplete survey responses were eliminated. In addition, some individuals who may have successfully implemented and sustained the ROI Methodology™, but who were unavailable to respond because they were no longer with the organization listed in the data base, or those who were available, but no longer in an evaluation role were eliminated. This left a population size of 629 remaining. In order to extrapolate to the sample population at the .05 level of significance, approximately 277 (44%) responses were necessary. By following the data collection procedures outlined in Chapter III, a response rate of 140 (22%) was achieved. A total of 149 started the survey and 135 (90.6%) completed it entirely.

Type of Organization

Of those responding, the majority represented the consultation and education industry with 28 responses (21.4%). Individuals representing government agencies were the next largest type of respondent with 14 (10.7%). Table 4.1 represents the type of organizations represented by individual survey respondents and their respective percentage to the total.

Table 4.1

Type of Organization You Represent

Type of Organization	Number (N = 131) Skipped Question (18)	Percent
Government	14	10.7
Finance	11	8.4
Health Care	8	6.1
Biomedical	3	2.3
Aviation, Space, & Defense	4	3.1
Automotive	2	1.2
Education	10	7.6
Chemical & Process Industries	2	1.5
Energy & Environmental	1	.8
Electronics & Communication	9	6.9
Consultation & Education	28	21.4
Other	6	4.6

“Other” categories of organizations represented by respondents included: telecommunications; diamond mining/luxury goods; manufacturing (food and beverage, respectively); computer operations (wireless & landline); oil/gas industry; information technology consulting and services; transportation; not-for-profit management; professional services; commercial (confectionary); retail; enterprise IT services; hospitality; and pharmaceutical.

Size of Organization

Respondents were asked to provide the size of their organization, with size representing all full-time, part-time, and contract employees. Options for size categories included 1- 10,000; 10,001-50,000; 50,001-85,000; and the category of 85,001-100,000 plus.

Table 4.2.

Size of Organization You Represent

Category								Response Count N = 131
1-10,000	1-500	501- 1,000	1,001- 3,000	3,001- 5,000	5,001- 10,000			84
10,001- 50,000	10,001 - 20,000	20,001- 25,000	25,001- 30,000	30,001- 35,000	35,001- 40,000	40,001- 45,000	45,001- 50,000	19
50,001-	50,001- 55,000	55,001- 60,000	60,001- 65,000	65,001- 70,000	70,001- 75,000	75,001- 80,000	80,001- 85,000	6
85,001- 100,000 plus	85,001- 90,000	90,001- 95,000	95,001- 100,000	Over 100,000				22

As shown in Table 4.2, the majority of respondents, 84 (64%), represent organizations in the category of 1 - 10,000 employees. The next largest group of respondents represent organizations in the 85,0001 -100,000 plus category with 22 (16.8%) of those respondents representing organizations with over 100,000 employees.

Approximate Annual Training Budget

Participants were asked to identify their approximate annual training budget with Question 24. Unfortunately, responses were open-ended and widely skewed with little

meaningful data provided. Of data disclosed, the median value is reported at \$1,400,000.00. Comments included:

- Cannot disclose, but more than 100 million
- Unknown
- Don't know, subcomponent budgets separate from department level budgets
- Varied across campus
- University-wide is unknown, departmental budget is small

Respondent Demographics

In order to understand the various roles and responsibilities of stakeholders in the ROI Methodology™, respondents were asked to provide their title, number of years in the HRD profession, and their gender. Table 4.3 shows the number and percent of each category.

Table 4.3

Respondent Demographics

Title	Number (N = 132) Skipped Question (17)	Percent
Executive	13	9.8
Director	21	15.9
Officer	2	1.5
Administrator	1	.8
Manager	27	20.5
Supervisor	3	2.3
Consultant (internal)	8	6.1
Consultant (external)	24	18.2
Trainer	8	6.1
Specialist	12	9.1
Designer	0	0
Analyst	3	2.3
Evaluator	3	2.3
Other	7	5.3

Table 4.3 - *Continued*

Years in the Profession	Number (N = 130) Skipped Question (19)	Percent
1-3 Years	12	9.2
4-6 Years	16	12.3
7-10 Years	34	26.2
11 Years or More	67	51.5
Gender	Number (N = 133) Skipped Question (16)	Percent
Male	74	55.6
Female	59	44.4

Table 4.3 shows that the majority of respondents 27 (20.5%), have manager in their title. External consultant, 24 (18.2%), is the next largest job title most frequently cited. Director is the next most frequently reported job title, 21 (15.9%), by those respondents representing internal practitioners.

Years of Experience in the Profession

Respondents were also asked to identify their years of experience in the profession. The majority of respondents, 67 (51.5%) report having 7 or more years experience in the HRD field. Regarding gender, 74 (55.6%) of respondents are male and 59 (44.4%) are female.

Level of Academic Achievement

Respondents were asked to provide their academic preparation in terms of highest degree achieved. Degree options included associate's degree, bachelor's degree, master's degree, and doctorate. The demographic information shown in Table 4.4 shows that the majority of respondents, 75 (56.8%) have completed a master's degree.

Table 4.4

Level of Academic Achievement

Highest Level of Academic Achievement	Number (N = 132) Skipped Question (17)	Percent
Associate Degree	3	2.3
Bachelor's Degree	28	21.2
Master's Degree	75	56.8
Doctoral Degree	24	18.2

A variety of disciplines were cited as a major course of study, including: accounting; human resource management; organizational management; instructional systems design; business administration; adult education, training, and performance management; communications/public relations; human resource development; organizational development; and juris doctorate.

ROI Certification

Respondents were also asked to describe their level of progress in terms of completing certification with the ROI Methodology™, with successful certification being defined as completion of the required ROI project.

Table 4.5

Achievement of ROI Certification

Have You Earned ROI Methodology™ Certification?	Number (N = 129) Skipped Question (20)	Percent
Yes	51	39.5
No	78	60.5

The majority of respondents, 78 (60.5%) have not completed certification while 51 (39.5%) respondents report successful completion of certification requirements.

Comments from those who have not yet completed certification include the following:

- Final report under construction
- I completed the coursework, but did not finish my project ROI
- I have not gotten 'certified' but I have done several Level 3s and Level 4s studies
- Am currently working on my project for ROI certification
- Project completed but timeline passed for submission
- I am in the process of earning ROI Methodology™ certification
- Attended (certification) but organization never allowed completion of project
- Almost. I have to submit my final work

Other relevant education or training cited by respondents include SPHR, PMP, CEIP, CAP, MT, MBA, CMP, CPLP, and Change Management certification(s).

Research Objectives

This research seeks to build upon current literature and research regarding evaluation capacity building, ROI Methodology™ process implementation as a specific evaluation strategy, and the change factors associated with sustainable implementation of a results-based measurement and evaluation system. The following research objectives were tested and addressed by linking quantitative and qualitative data collection and analysis:

O₁: Compare the association of sustainable ROI process implementation and the associated degree in which a planned change process is applied to implementation.

O₂: Compare the impact of Context, Capacity, Capability, and Change Process factors upon the degree of ROI Methodology™ sustainability.

O₃: Describe characteristics of sustainable ROI process implementation.

O₄: Compare the association of sustainable ROI process implementation and the number of barriers associated with implementation.

To test Research Objective One, a composite of variables representing dimensions of a planned change process, reflected in Table 3.1, and a composite of variables representing dimensions of sustainability, reflected in Table 3.1, were used to determine the correlation. To test Research Objective Two, a composite cluster of variables representing four dimensions of change capacity (Context, Capability, Capacity, and Planned Change Process), as reflected respectively in Table 3.1, were used to determine the predictive ability of change capacity factors. To test Research Objective Three, frequencies, percentages, and descriptive statistics were used. To test Research Objective Four, a composite of variables representing implementation barriers, reflected in Table 3.1, were used to test the association between variables.

Analysis of Data

The purpose of this study is to identify and explore characteristics of sustainable ROI process implementation in HRD practice with organizations that have had experience implementing the ROI Methodology™. In the quantitative, phase one process of this sequential mixed method research, a web-based survey was used for data collection. The survey instrument was analyzed for reliability using a Cronbach's alpha numerical coefficient of reliability. Computation of alpha is based on the reliability of a test relative to other tests with same number of items, and measuring the same construct of interest (Hatcher, 1994).

For the survey instrument used in this research study, the procedure output shown

in Table 4.6, reports an overall raw alpha of .95. Nunnally (1978) indicates that a 0.7 is an acceptable reliability coefficient. The higher the score, the more reliable the generated scale is considered to be.

Table 4.6

Cronbach's Alpha of Survey Instrument: Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.943	.950	47

Research Objective One states that the degree of sustainable ROI process implementation is associated with the degree in which a planned change process is applied to ROI implementation. A correlation coefficient was used determine the relationship between the two variables. As shown in Table 4.7, a significant relationship was found between the frequency with which a planned change process is used in ROI process implementation and the degree of sustainable ROI process implementation.

Table 4.7

Correlations Between Research Objective One Variables

		plannedchgprocess	sustainability
plannedchgprocess	Pearson Correlation	1.000	.374**
	Sig. (2-tailed)		.000
	N	148	135
sustainability	Pearson Correlation	.374**	1.000
	Sig. (2-tailed)	.000	
	N	135	135

**. Correlation is significant at the 0.01 level (2-tailed).

Specifically, the correlation showed a highly significant positive relationship with $r(133) = .374, p = <.001$. This finding supports the premise of this research by suggesting that the more a planned change process is applied to ROI Methodology™ implementation, the more sustainable the implementation is likely to be.

Question C9 (a-l) asked participants to rate the extent to which organizational change patterns typically occurred during complex change efforts of any kind, up to and including ROI implementation. Using a scale of 1 to 6, with 1 being “No Extent”, 5 being “Very Significant Extent”, and 6 being “No Opportunity to Observe”, 51 (36.4%) indicate that “complex change projects require approval at multiple leadership or management levels” to a “Very Significant Extent.” However, 50 (35.7%) indicate that leaders “effectively prioritize overlapping change projects” to a “Limited Extent” and 47 (33.6%) indicate that the extent to which leaders “assess the overall impact (ie. upstream, downstream)” of organizational change before going forward is “Limited”. In addition, 46 (33.3%) indicate that leaders are “sensitive to the effect of cumulative, overlapping changes upon employees' energy, motivation, or adaptability” to a “Limited Extent”. All responses about organizational change patterns are provided in Appendix J.

The mean responses and SD for each factor are noted in Table 4.9. As shown, the factor with the highest mean is “complex change projects require approval at multiple management and leadership levels” at 3.72 (SD = 1.474). The change pattern with the lowest mean is “leaders effectively prioritize overlapping change projects” at 2.29 (SD = 1.202).

Table 4.8

Organizational Change Patterns

Please rate the extent with which each factor TYPICALLY occurs during a complex change effort of ANY kind (up to and including ROI implementation), in your organization or your client organizations (on average).		
	Mean	SD
Complex change projects require approval at multiple leadership levels	3.72	1.474
The business case for complex change projects is communicated effectively	2.73	1.205
Project leaders balance time spent planning with time spent implementing	2.62	1.240
Leaders are sensitive to the effect of cumulative, overlapping changes	2.60	1.143
Performance expectations, after the introduction of a change effort, are realistic	2.53	1.247
Leaders effectively prioritize overlapping change projects	2.29	1.202
Management-created project teams fully understand and support changes	2.72	1.200
Past change initiatives have successfully met strategic goals	2.55	1.305
Failed change efforts are typically attributed to employee resistance	2.66	1.525
Internal controls are in place to ensure that resources (people, money, materials, tools, technologies) are properly utilized during a major change effort	2.44	1.195
Leaders stay on track throughout every phase of a complex change effort	2.56	1.213
Leaders assess the overall impact (ie. upstream, downstream) to the organization before going forward with a complex change	2.54	1.294

Comments included the following:

- Overlapping change plus under resourced teams are a significant barrier. Do the current work, plus the change.
- Many change projects I've witnessed have been decided at the top. Managers and stakeholders under that top level do not know/understand the business objectives of the change.

Research Objective Two states that the degree of sustainable ROI process implementation is associated with an organization's degree of change response and capacity. A multiple regression analysis was conducted to determine if Context, Capacity, Capability, and Planned Change Process factors could predict sustainability. Casewise diagnostics located only one outlier which was retained in the data set. Evaluations of the normality, linearity, and homoscedasticity assumptions were met within acceptable limits. The linear combination of predictors in the model was significant in predicting sustainability, $F(4, 130) = 20.23, p < .001$. $R^2 = .62$ which indicates approximately 62% of the variance in sustainability is explained by its linear relationship with Context, Capacity, Capability, and Planned Change Process variables. A summary of the regression coefficients shows Capability at .322, Context at .187, Capacity at .107 and Planned Change Process at .086. Based on the Standardized Beta Coefficients, the strongest predictor was Capability and the weakest was Planned Change Process. All predictors had a positive impact on sustainability.

Research Objective Three seeks to describe characteristics of sustainable ROI process implementation. Frequencies, percentages, and descriptive statistics were used

to identify characteristics of sustainability. Characteristics included critical components of mature, sustainable results-based measurement and evaluation systems that have been identified in previous research (Kusek & Rist, 2004; Mourier & Smith, 2001), including: governance; operating standards; resource allocation; demand; utility; effectiveness; efficiency; ownership; clear roles and responsibilities; and accountability. Other indicators of sustainability included familiarity with the ROI process based upon years of implementation experience and the degree of integration of the methodology based upon perceived valuation of the methodology to the organization (among others).

Collectively, these characteristics and components are defined in this research as: number of years experience with ROI Methodology™ implementation; number of impact studies conducted annually using the ROI Methodology™; percentage of HRD staff with defined evaluation roles and responsibilities; percentage of HRD staff with formal training in evaluation; the percentage of total HRD budget applied towards evaluation; percentage of evaluation activity governed by written evaluation policies, procedures, and standards, including defined criteria for selecting programs to evaluate at the ROI level; percentage of evaluation data generated from utilization of the ROI Methodology™ that reaches executive level decision makers; percentage of HRD results tracked with a publicized “scorecard” approach; and percentage of data generated from utilization of the ROI Methodology™ that is applied towards continuous improvement activity.

These characteristics are represented in questions A1 (a-k), A2 (a-g), A3 (a-d), A4 (a-f), E20 (a-g).

Characteristics of Sustainable ROI Process Implementation

Years Experience with the ROI Methodology™

As shown in Table 4.9, the majority of individual respondents 62 (48.1%) reported one to three years experience with utilization of the ROI Methodology™. Internal practitioners also reported one to three years experience with organizational use of the ROI Methodology™. The majority of external consultants 39 (41.9%) report “no opportunity to observe” the ROI Methodology™ experience levels of client organizations.

Table 4.9

Number of Years Experience Utilizing the ROI Methodology™

	None	1-3	4-6	7 or more	No Opportunity to Observe	Response Count
You	17.1% (22)	48.1% (62)	18.6% (24)	14.7% (19)	1.6% (2)	128
Your Organization (if you are an internal)	18.9% (21)	41.4% (46)	12.6% (14)	10.8 (12%)	16.2% (18)	114
Your Client Organizations (on average for externals)	20.4% (19)	19.4% (18)	12.9% (12)	5.4% (5)	43.0% (40)	93

Comments:

- The methodology, while extremely valuable, has not "caught on" here. We are still asked to muddle through quality system/compliance basics and perform rudimentary (level 0-1) analyses vs. demonstrating anything higher. There

appears to be a lack of focus regarding workplace learning and a clear lack of focus on measurement and evaluation. Sadly, I think it will be years until there is even a perception of a need for this valuable methodology.

- We have just attended the 5 day ROI certification in Nov 09, and are working on a few projects to measure the ROI in the training investments of our clients
- I recently took the certification course and planning is underway for completion of first study
- Only one project fully completed

Number of Impact Studies Conducted Using the ROI Methodology™

Respondents were also asked to describe the number of impact studies conducted annually with use of the ROI Methodology™. As shown in Table 4.10, the majority of respondents 81 (63.3%) state that, as individual practitioners, they conduct one to three impact studies annually through use of the ROI Methodology™. This is consistent with reports from the majority of internal practitioners 46 (41.4%) who state that their organizations also conduct one to three impact studies annually with use of the ROI Methodology™. The majority of external consultants 40 (43 %) reported “no opportunity to observe” the number of impact studies conducted annually by their client organizations.

Table 4.10

Number of Impact Studies Conducted ANNUALLY by You or Your Organization(s)

Using the ROI Methodology™

	None	1-3 years	4-6 years	7 years or more	No Opportunity to Observe	Response Count
You	15.6% (20)	63.3% (81)	10.9% (14)	5.5% (7)	4.7% (6)	128
Your Organization (if you are an internal)	17.5% (20)	44.7% (51)	13.2% (15)	8.8% (10%)	15.8% (18)	114
Your Client Organizations (on average for externals)	17.2% (16)	31.2% (29)	6.5% (6)	2.2% (2)	43.0% (40)	93

Percentage of HRD Staff with Defined Evaluation Roles

As shown in Table 4.11, the majority of respondents 58 (43.6%) report that one to nineteen percentage of HRD staff have defined evaluation roles within their organization, or client organizations (on average). The next highest percentage of staff with defined roles is reported to be twenty to thirty-nine percentage, by 22 respondents (16.5%).

Table 4.11

Approximate Percentage of Training, HRD Staff With Defined Evaluation Roles

	None	1- 19%	20- 39%	40- 59%	60- 79%	80- 100%	No Opportunity to Observe	Response Count
Select One	6.0% (8)	43.6% (58)	16.5% (22)	9.8% (13)	9.8% (13)	7.5% (10)	6.8% (9)	133

Percentage of HRD Staff with Formal Training in Evaluation

As shown in Table 4.12, more than half of respondents, 82 (61.7%) report that one to nineteen percent of HRD staff within their organization, or client organizations (on average), have formal training in evaluation. This is consistent with findings that the large number of respondents representing organizations with 1 – 500 employees, where professional development expenditures may be more constrained than in those organizations with a larger employee base. In addition, this is consistent with reports that the majority of respondents, 58 (43.6%), have less than a third of their role – one to nineteen percent – defined or dedicated to evaluation responsibilities.

Table 4.12

Approximate Percentage of Training, HRD Staff With Formal Training In Evaluation

	None	1- 19%	20- 39%	40- 59%	60- 79%	80- 100%	No Opportunity to Observe	Response Count
Select One	8.3% (11)	61.7% (82)	7.5% (10)	8.3% (11)	3.8% (5)	7.5% (10)	3.0% (4)	133

Percentage of Evaluation Activity Governed by Policies, Procedures, Standards

Another criteria for assessing the maturity level of ROI Methodology™ includes the presence of documented policies, procedures, and standards governing its use.

As shown in Table 4.14, the majority of respondents, 39 (29.5%) report in Question E14 that one to nineteen percent of evaluation activity within their organization, or client organizations (on average), is governed by policies, procedures, or standards.

Table 4.13

Approximate Percentage of Evaluation Activity Governed by Policies, Procedures, or Standards

	None	1-19%	20-39%	40-59%	60-79%	80-100%	No Opportunity to Observe	Response Count
Select One	20.5% (27)	29.5 % (39)	10.6% (14)	6.8% (9)	10.6% (14)	15.2% (20)	6.8% (9)	132

Criteria for Selecting Programs to Evaluate at the ROI Level

Mature evaluation practices and systems include defined criteria for selecting which programs to evaluate at the ROI level (Phillips & Phillips, 2007). Question E20 asked participants to identify the most important criteria used when selecting programs for higher level evaluation. Table 4.14 shows that the most important criteria in selecting programs to evaluate at the ROI level is “important to strategic objectives” with a 94 (74.0%) selecting this criteria as most important. This criteria is consistent with previous research (Phillips & Phillips, 2007) regarding training evaluation. The least important criteria is that the program is “time intensive” with only 34 (26.0%) selecting this criteria as most important.

Table 4.14

Which Criteria is MOST Important When Selecting Programs or Projects to Evaluate at the ROI Level, in your Organization, or your Client Organizations (On Average)

Criteria	Percent	Number (N = 131) Skipped Question (18)
Involves large audience	35.9	47
Expected to have a long life cycle	32.8	43
Important to strategic objectives	74.0	97
Measures/outcomes linked to	67.2	88
operational goals	60.3	79
Costly, expensive	26.0	34
Time intensive	59.5	78
Highly visible	3.8	5
No opportunity to observe		7
Other		

“Other” comments included the following:

- We really are only gathering L1 and L2 data on a consistent basis. Sometimes we do L3.
- Although I have not completed the study I have answered based on experience with other evaluative methods in this industry.
- All of my ROI studies have been on the effectiveness of sponsored meetings to increase Asset Growth or Sales.

Percentage of Data Generated from Use of the ROI Methodology that Reaches

Executive Level Decision Makers

Research shows (Kusek & Risk, 2004) that a sustainable measurement and evaluation system is associated with the extent to which results data are reported to senior leaders and decision makers. In Question E15, respondents were asked to describe the extent to which results data generated from use of the ROI Methodology™ reached

executive level decision makers in their organizations, or client organizations (on average). According to Table 4.15, the majority of respondents, 58 (43.6%) indicate that one to nineteen percent of evaluation data reaches senior level decision makers. While a small percentage, 8 (6.0%), report that no ROI evaluation data reached decision makers, it may be that those respondents were those who were still attempting to implement their initial impact study and/or those who reported less than one to three impact studies conducted annually.

Table 4.15

Approximate Percentage of Data Generated from Use of the ROI Methodology™ that Reaches Executive Level Decision Makers in Your Organization, or Your Client Organizations (on average)

	None	1- 19%	20- 39%	40- 59%	60- 79%	80- 100%	No Opportunity to Observe	Response Count
Select One	6.0% (8)	43.6% (58)	16.5% (22)	9.8% (13)	9.8% (13)	7.5% (10)	6.8% (9)	133

Percent of HRD Results Publicized with a “Scorecard” Approach, in Your Organization, or Your Client Organizations (on average)

Respondents were asked in Question E16 to describe the extent to which results data generated from use of the ROI Methodology™ is publicized in their organizations, or client organizations (on average) with a “scorecard” approach. As shown in Table 4.16, the majority of respondents, 35 (26.1%) indicate that one to nineteen percent of HRD results data is publicized in a “scorecard” manner. The next largest percentage, of respondents, 30 (22.4%) report that no ROI evaluation data is publicized with a “scorecard” approach. This is consistent with the percentage(s)

of respondents with limited ROI implementation experience, limited formal training in evaluation, limited utilization of the methodology to conduct annual impact studies, and/or those who stated they have yet to integrate the ROI Methodology™ into their organization and/or to integrate evaluation responsibilities into a defined HRD role.

Table 4.16

Approximate Percentage of Data Generated that is Publicized with a “Scorecard”

Approach in Your Organization, or Your Client Organizations (on average)

	None	1- 19%	20- 39%	40- 59%	60- 79%	80- 100%	No Opportunity to Observe	Response Count
Select One	22.4% (30)	26.1% (35)	11.9% (16)	8.2% (11)	9.7% (13)	13.4% (18)	8.2% (11)	134

Percent of Data Generated from Use of the ROI Methodology™ Applied Towards

Program, Policy, Process Improvement

Systematic use of results data for continuous program, policy, and process improvement is another characteristic of a durable, mature measurement and evaluation systems (Bamberger et al, 2006; Kusek & Rist, 2004; Phillips & Phillips, 2010; Russ-Eft & Preskill, 2001; Ulrich, 1997). To that end, Question E17 asked participants to describe the extent to which data generated from use of the ROI Methodology™ is applied towards continuous improvement activity. As shown in Table 4.17, the majority of respondents, 41 (31.3%), report the extent to which results data is used for continuous improvement to be one to nineteen percent within their organization, or client organizations (on average). Again, this finding is not surprising given that the majority of respondents described themselves as early adopters or infrequent users of the

Methodology™.

Table 4.17

Approximate Percentage of Data Generated from Use of the ROI Methodology™ Applied Towards Program, Policy, Process Improvement in Your Organization, or Your Client Organizations (on average)

	None	1- 19%	20- 39%	40- 59%	60- 79%	80- 100%	No Opportunity to Observe	Response Count
Select One	9.2% (12)	31.3% (41)	14.5% (19)	14.5% (19)	6.1% (8)	12.2% (16)	12.2% (16)	131

Percent of Total Training, HRD Budget Applied Towards Evaluation

Respondents were asked in Question E18 to identify the percentage of total training or HRD budget dollars allocated to evaluation. As shown in Table 4.18, more than half of respondents, 72 (54.1%) indicate that one to nineteen percent of the total training or HRD budget is applied towards evaluation within their organization, or client organizations (on average).

Table 4.18

Approximate Percentage of Total Training, HRD Budget Applied Towards Evaluation

	None	1- 19%	20- 39%	40- 59%	60- 79%	80- 100%	No Opportunity to Observe	Response Count
Select One	12.8% (17)	54.1% (72)	8.3% (11)	3.8% (5)	3.8% (5)	3.8% (5)	13.5% (18)	133

Descriptive Statistics for Select “Maturity” Variables E12-18

Table 4.19 shows descriptive statistics for select variables used to analyze organizational maturity with the process and practice of ROI implementation. As shown in Table 4.20, the mean for “percentage of results data reaching executive decision makers” is highest at 3.78 with a SD of 2.000 and the mean for “percentage of HRD staff with formal evaluation training” is lowest at 2.72 with a SD of 1.509.

Table 4.19

Descriptive Statistics for Select Maturity Variables

<i>Approximate Percentage of</i>	Mean	SD	N
HRD staff with defined evaluation roles	3.23	1.701	133
HRD staff with formal evaluation training	2.72	1.509	133
Evaluation activity governed by operating policies, standards	3.30	2.000	134
Results data reaching executive decision makers	3.78	2.000	146
Results data tracked with “scorecard” approach	3.30	2.023	134
Results data used for continuous improvement	3.63	1.939	131
Total annual budget applied towards evaluation	2.97	1.942	133

Previous research (Bell & Morse, 2001; Hailey & Balogun, 2002) has shown that sustainable measurement and evaluation systems are characterized by their alignment (congruence) with business strategy and the perceived value or credibility of results data provided to the organization. To that end, respondents were asked in Question E19 (a-k) to rate the extent to which results data generated from use of the ROI Methodology™ adds overall value to the organization in terms of: credibility of the training or HRD function; alignment of the training or HRD function to strategic business needs; efficiency of solution design, development, and/or delivery; effectiveness of solution design, development, and/or delivery; quality of solution design, development, and/or delivery; increased support from key stakeholders; policy

decisions about performance practices, resources, and/or rewards; processes used to track employee performance; processes used to track organizational performance; institutional knowledge-sharing; and an enhanced culture of accountability.

Data generated from use of the ROI Methodology™ is reported by 24 (18.6%) to add a “Very Significant Extent” of overall organizational value through the alignment of the training, HRD, performance improvement, or meetings function to strategic business needs. In addition, data generated from use of the ROI Methodology™ is reported to add a “Significant Extent” of overall organizational value to the “quality of solution design, development, and/or delivery”, 44 (33.8%). The area where data generated from use of the ROI Methodology™ is reported by 30 (39%) to add a “limited” extent of overall organizational value is around policy decisions about performance practices, processes, or reward structures. All responses about perceived organization value of the ROI Methodology™ are provided in Appendix J.

Descriptive Statistics for Perceived Value Variables E19 (a-k)

Table 4.20 shows descriptive statistics for variables used to analyze the perceived organizational value of the ROI Methodology™. As shown, the mean for “quality of solution, design, development, or delivery” is highest at 3.99 with a SD of 1.128, closely followed by the means for “alignment of training, HRD solutions to strategic business needs” at 3.91 (SD = 1.110) and “effectiveness of solution, design, development, or delivery at 3.91 (SD = 1.202). The area of perceived organizational value with the lowest mean is “policy decisions about performance practice, resources, or reward structures” at 3.29 (SD = 1.193).

Table 4.20

*Perceived Overall Organizational Value of Data Generated from Use of the ROI**Methodology™*

Please rate the extent to which data generated from the ROI Methodology™ adds OVERALL VALUE to each of the following components, of your organization or your client organizations (on average):

	Min	Max	Mean	SD	N
Credibility of the training, HRD function	1	5	3.36	1.220	130
Alignment of HRD solutions to strategic business needs	1	5	3.91	1.110	105
Efficiency of solution design, development, and/or delivery	1	5	3.81	1.190	109
Effectiveness of solution design, development, and/or delivery	1	5	3.91	1.202	107
Quality of solution design, development, and/or delivery	1	5	3.99	1.128	107
Increased support from key stakeholders	1	5	3.81	1.084	113
Policy decisions about performance practices, resources, and/or rewards	1	5	3.29	1.193	121
Processes used to track employee or employee group performance	1	5	3.37	1.142	115
Processes used to track organizational performance	1	5	3.45	1.217	118
Institutional knowledge-sharing	1	5	3.35	1.213	117
Enhanced culture of accountability	1	5	3.42	1.250	118

General Comments

In Question 30, participants were invited to share general comments regarding the survey, the research, or the topic of sustaining a comprehensive measurement and evaluation system. Comments included the following:

- This is an excellent topic that will give tremendous insight into the ROI

Methodology and its application in the workplace.

- VERY well done!!! I look forward to the study results.
- Good survey. I found that a lot of organizations do not want to invest the time and also they do not have the skilled people to support ROI. This is maybe the case why HR's budgets get cut even further than ever before. I really hope that changes.
- Look forward to seeing results.
- I think the work done by the ROI Institute is valuable. I only wish our organization were more open minded about the use of such a methodology. We seem to be decades behind and the management team (and the internal barriers within my part of the organization) have made it very difficult to get beyond level 2 evaluation...please keep up the good work and know that your collective vision is motivational...even while we slog through the mundane. Good Luck!
- The change culture related to ROI is a slow process. After 13 years of following the ROI methodology, developing standards, being an advocate...we are only now seeing in-depth level 4 analysis. It is exciting and powerful to see our business partners doing impact studies. But I will be honest with you, it was the business that drove this and not L&D! I don't even think the business thought of the ROI methodology when they approached their studies...they just wanted to understand what was driving performance and conducted their own studies outside of L&D. What does that say about L&D being a business partner?!
- We in fact developed the Kaplan & Norton method years ago to measure impact but that has been met with less than stellar adoption or success...That being said, evaluation and scorecarding standards, processes are well established and have

enabled great cost savings up to level 3.

- A general lack of physical and financial resources is the main issue we have encountered in implementing the ROI Methodology. Additionally, as a general observation comment: the risk in implementing measurement and evaluation in many organizations, is that it becomes another tick on the executive / management list of 'things to do' rather than working with it to bring about significant performance improvement across the organization.
- It's very important to implement ROI evaluation and to know how to sustain it!
- Regarding earned ROI Methodology Certification -- I've not been able to get to Level V, within this higher education environment that addresses faculty professional development, for a variety of reasons (quite publishable by the way).
- Excellent survey - particularly the section on the uptake of ROI. I can't wait to see the results.
- The ROI Methodology™ is excellent. However, building capacity for measurement and evaluation in the learning/training field among colleagues is no easy task. Typically, these individuals avoid quantitative analysis due to inability or lack of knowledge and skills. This is a major barrier to successful implementation. However, I am optimistic that, with time, a new generation of educators will receive the knowledge they will need to achieve results in the very important discipline of evaluation. Another major barrier in government is that of employee turnover, particularly in the HR area which includes learning.
- Very valuable for self-evaluation.

- I have become very discouraged with the progress of ROI and impact studies in the meetings industry. The recent economic slump has definitely not helped.
- If leadership doesn't buy in 100%, forget about it.
- Very comprehensive. Gave me a sense of what is not being done. Will look forward to the results of the survey.
- This survey was way too long. I also felt that more definition was needed in relation to the terms being used. "Organization" needed to be defined. ROI needed to be defined. Do you mean Level 1 and 2 info or the whole ROI process? We do Level 1s for all courses and Level 2s for some. I did several L3s last year and some Level 4s. I have not done any Level 5s - i.e. ROI.
- Most of my answers relate to fear and no acceptance of conducting a ROI study. Project has not been completed because of a lack of support to do the project.
- Great topic. Good Luck!
- Important data to analyze!
- This is an important study.

Research Objective Four states that the degree of sustainability with ROI process implementation is associated with the number of barriers associated with implementation. A correlation coefficient was used to determine the relationship between the two variables. The analysis showed a non-significant negative relationship with $r(133) = -.136$, $p = .116$. Therefore, no interpretation should be made of the positive or negative relationship since it is statistically equal.

Participants were asked to identify the most frequently occurring barriers to ROI process implementation in survey questions B5 (b-k), B6 (a-h), B7 (a-d), and B8 (a-f). As

shown in Table 4.21, more than half of respondents, 101 (70.1 percent), indicate that “conflicting, competing business priorities/demands” frequently pose a barrier and “detract from ROI implementation focus”. A full account of all reported barriers is provided in Appendix J.

Table 4.21

Most Frequently Occurring Barriers to ROI Process Implementation

Please indicate which of the following represent the MOST FREQUENTLY occurring barriers to ROI process implementation, in your organization or your client organizations (on average). CHECK ALL THAT APPLY.	Response Percent	Response Count
Conflicting, competing business priorities/demands detract from ROI implementation focus	70.1	101
Insufficient resource allocation (people, money, materials, tools, technologies)	62.0	88
Sponsors’ focus, commitment becomes diverted during implementation	56.3	80
Poor assessment of organizational readiness to meet new demands	52.1	74
Ineffective sponsorship during project start-up	42.0	

Qualitative Research

For the qualitative research phase, 16 individuals from the available population were purposively invited to participate. Individuals were invited for telephone interviews based upon their individual and/or organizations’ maturity level with the ROI Methodology™, as reported in the quantitative phase of research. In addition, five individuals who expressed interest in the topic, but commented that they could not

complete the quantitative survey because they were not “far enough along in the process” were invited to participate in order to compare and contrast “early adoption” and sustainability issues related to ROI process implementation.

Of the total 21 individuals invited to participate, 13 volunteered, 7 did not respond to the invitation, and one was not able to complete the interview process due to scheduling difficulties. The transcribed documents and researcher’s field notes provided 149 pages of interview data to analyze. Given that professionals who attempt to implement and sustain the ROI Methodology™ in an international environment may experience unique contextual issues, cultural challenges, or constraints, individuals responsible for ROI implementation in organizations outside of the US were eliminated.

Analysis of Data

In the qualitative phase of this research study, data collection and data analysis were conducted as a simultaneous and iterative process (Creswell, 2003; Merriam, 1998). Throughout the data analysis process, emerging patterns and themes were organized categorically and chronologically, reviewed continuously, and coded.

After final editing of interview documents, specific research design steps were used to conduct data analysis and move deeper into an understanding and interpretation of the larger meaning of the data. As noted in Chapter III, these steps included: a) organizing and preparing the data for analysis; b) reading through all the data to obtain a general sense of the information and its overall meaning; and c) beginning detailed analysis with a coding process, which is the process of identifying themes in accounts and attaching labels (codes) to index them. Themes are features of participants’ accounts

or experiences that are seen as relevant to the research questions. (Creswell, 2003; Strauss & Corbin, 1998).

Perceived factors related to relevant research questions about sustainability were highlighted, grouped into themes, subthemes, and coded by the researcher. These were then compared and merged with patterns identified by two external auditors, who helped analyze the data for central themes (central phenomenon), repetition of expressions, key terms, instances, or accounts, and relationships between significant expressions (Glaser & Strauss, 1967). The auditors also checked for researcher bias in the coding process. To preserve anonymity, participant transcripts were randomly assigned a two letter designator (e.g. P1, P2, etc). Content analysis included counting the frequency with which an idea or theme was repeated. Once a coding system was established, the data was entered into a coding matrix for thematic analysis. In each cell of the matrix, themes were coded for each participant and used to calculate the totals across all participants for each theme and factor.

Participants and Corresponding Themes

Using an Affinity Diagram (Oseko & Tetsuichi, 1990) approximately 57 factors were first identified and sorted into related groups by the researcher and the two external auditors. Affinity diagrams are proven business tools for gathering large amounts of data and organizing them into groupings based on natural relationships. Groups are established based on the essential link among ideas as evidenced by words or phrases that clearly convey the same meaning. In this study, meanings and relationships were reviewed and confirmed by the researcher and two external auditors. Relationships

among two or more groups were arranged under a “superheader” category, as shown in Figure 4.1.

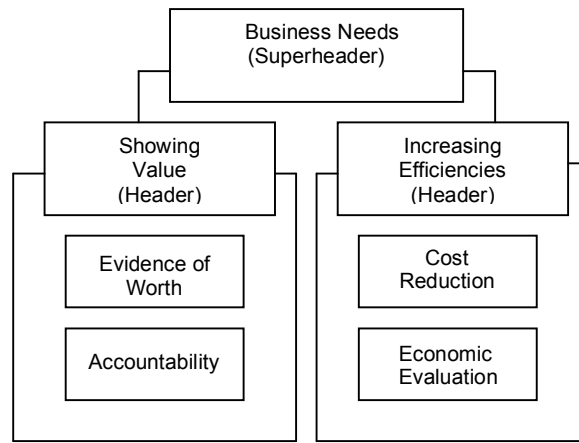


Figure 4.1. Sample Affinity Diagram for Thematic Analysis. Adapted from *Handbook of Quality Tools* by K. Oseko and A. Tetsuichi, 1990, p. 246-250.

In this example, participant accounts about business drivers associated with ROI were first grouped together as unique headers (i.e. showing value, increasing efficiencies) where ideas, phrases or terms (i.e. evidence of worth, cost reduction) were closely related. Given the relationships between these two header groups, they were ultimately coded in the “superheader” thematic category of Business Needs. While a variety of factors and terms emerged due to the broad range of experience represented by each respondent, there were recurring themes that were consistent among participants and consistent with the research questions. These included the following:

1. Business Needs
2. Sponsorship and Leadership Support
3. Internal Support
4. Partnering and Influencing
5. Continuing Education

6. Communicating for Impact
7. Implementation and Integration
8. Readiness and Change Management
9. Dedicated Resources
10. Utility of Results Data
11. Value Creation

Theme One: Business Needs

All participants indicated that preliminary and continued alignment of the ROI Methodology™ to relevant business needs was a critical component of a sustainable measurement and evaluation system. Strategic business needs were consistently described as driving forces causing an organization to seek out and subsequently maintain and sustain the ROI process Methodology™. Implementation decisions were all based on the perceived ability of the Methodology™ to address “relevant” business needs in the areas of: cost efficiency; cost containment; and return on investment and/or economic evaluation with business critical initiatives in such areas as human capital development, talent management, leadership development, competency development, product development, mergers and acquisitions, technology integration, among others.

While adoption of the ROI process was described by many as a reactive response to reducing costs, improving cost efficiencies, or enhancing readiness capabilities, many participants also cited proactive, “forward thinking” strategies as a business driver influencing implementation. For example:

A lot of work had been done to create a common cohesive integrated learning structure...So you had that alignment in that everyone was beginning to do

things in a similar fashion around needs assessment, design...and a lot of work had been done to collect data on what was being spent on learning. That data was made very visible to all of the executives in the organization which was another point of [organizational] maturity, because often you walk in and you have no idea what is being spent, what is going on. But we now knew that and our executives knew that, so then was certainly an expectation...‘okay, if this is what you’re spending we also want to know what we’re getting for it.’

Others referenced benchmarking as an impetus for pursuing ROI process implementation as a business strategy and performance improvement tool:

Some benchmarking...had also been done as to where [the organization] needed to go with their learning organization and then they hired the CLO to come in and put that into place...knowing with benchmarking that it [learning organization] wasn’t structured the way it should be to be as effective as it could be...really that business driver was that we needed a learning organization that was efficient and effective...

Conversely, business needs were also identified as a restraining force during organizational transitions, changes in leadership, and/or shifts in strategic direction, even when the ROI Methodology had a proven track record of meeting critical business needs. Specifically:

[The organization] started to go through their first series of downsizing...we got a new VP of Sales Training in-house and he came from the school of ‘as long as I train, people benefit from it.’ He frankly said ‘you are doing great stuff here, but

we can't afford to have such a specialized position when we can't even get the day-to-day work done now, because we are eliminating so many positions'...[the organization] ended up eliminating between 6,000 or 7,000 jobs. So I was given the opportunity to stay on or take early retirement and do something else and frankly I didn't want to do anything else, so I left. They do nothing when it comes to measurement now, absolutely nothing. Not even level 1 surveys...But, shortly after I left...they hired me back as a contractor to facilitate...programs for them, so I have been doing these programs now for close to two years and I am in the process of working with them to reintroduce the ROI Methodology™ and we are actually getting ready to do our first parallel study.

Theme Two: Sponsorship and Leadership Support

Respondents were unanimous in their contention that senior leadership sponsorship and support was a “definite” pre-requisite to early adoption and support of the ROI process as well as a necessary condition for sustainable ROI process implementation. Comments included the following:

Sponsorship from the top, if you don't have that it won't sustain, it doesn't matter what it is...sponsors have to educate, not just shake their head and nod their head, so I think true sponsorship at a high level is THE most important key to sustainability and along with that comes understanding what it really is and how it benefits the organization and if the training department is the only one saying that, it won't last...you have to feed the sponsor with information...but they have to regurgitate it in certain ways at certain times in order to support it. But that's not any different than any other change.

Theme Three: Internal Support

Internal support from key stakeholders was a common theme identified by all respondents as a success factor influencing sustainability. The need for support from the Human Resource function, in particular, was universally acknowledged. “The biggest barrier, sadly, was the Human Resources department.” Another said, “I learned...to be sustainable you need support on all levels and you needed funding from upper levels.”

Other comments included:

Critical to sustainable ROI implementation is...support from the Executive Level and good Human Resources support, because you are talking about people, you’re talking about whether what you’re trying to prove, the value of a learning effort, a meeting, a conference...what you’re trying to prove the value of, is going to affect people. So you need Human Resources, you need them to understand, you need your Executive Level sponsor. Really with those two...understanding and really buying into what it is you are trying to prove, [you] can pretty much sustain a good methodology.

Another respondent commented about the relationship between sponsorship support and “sustaining sponsorship” at the internal level:

Even a strong sponsor, if you can’t cascade it down, the middle will stop it [ROI process implementation]...if a strong sponsor leaves and you’ve cascaded it properly it shouldn’t matter that a strong sponsor left, if you really and truly have brought it into the culture so to speak. But keep in mind we are talking 5 – 7 years to do something like this, to really bring something into the culture. That alone even in today’s dynamic environment in the 21st century with change overlapping

change, priority after priority changing, it is really tough. It is tough to sustain anything.

Theme Four: Partnering and Influencing

Research shows that collaborative partnerships are integral to successful and sustainable ROI implementation. Participants described challenges associated with seeking and charting roles to expand their influence from that of a transactional “pair of hands” to that of a transformational and strategic business partner. Respondents uniformly agreed that becoming “a value-added business partner” was both a driver and enabler to implementing and sustaining ROI process implementation. In general, participants defined partnership as a focus on shared strategic priorities, accountability for generating “usable” results data, and the willingness to challenge the “not invented here syndrome.” People skills [are] probably more important than anything.” Another respondent described partnership in terms of “shuttle diplomacy”, an influencing process used to filter organizational “noise”, counter barriers, and influence stakeholders during ROI process implementation.

Theme Five: Continuing Education

Respondents unanimously described incidents and experiences related to the theme of initial and continuing education to promote, define, and communicate the purpose and importance of ROI process implementation as a value-added “business process” as well as a measurement process:

I think the other thing is educating... We need to use our studies to educate that it takes these three things, or these four things to cause a result and you have got to repeat that and repeat that until you educate people to know that you get

performance by doing these things...and if you take this piece out you get a different result. If you take that piece out you get a different result. So in order to get the result that we got here, here are the things we did, here are the things the organization did, here's what the management did, here are all the things that caused this result to happen.

Ongoing communication with internal stakeholders was another key theme as reflected in the following:

Managers really in many cases do not know how significant their actions can be ...They totally under-estimate their own value in creating the results that they want, influencing...a transfer strategy, they totally under-estimate. I think that's because we've not educated them enough about it...Managers have to be involved.

"Constant, continual communication of results" and was emphasized as a factor influencing sustainability by all respondents, with one participant emphasizing the need to "put success stories back out into the organization in the form of case studies or project studies or reports." Similarly, another participant said:

We have, as part of our policy...our model...my role...is continuing to keep it alive and visible within our organization and in front of our leaders so that they can then in turn be champions from an organizational perspective. We do ongoing training of our staff...We always have what I call our internal document...to summarize [evaluation results] in manageable simple information chunks...I will always share an ROI study with our Project Manager, Instructional Design and Community Practices because that is part of our internal sharing as well. There

are some occasions where we will publish them. I am working on a couple of them right now.

Theme Six: Communicating for Impact

“Communication, communication, communication” was a resounding theme among respondents, who all viewed “communicating for impact” as a critical component of successful and sustainable ROI process implementation. Another participant reported that it was important to ensure that up-front goals were established and to “then communicate that objectives are being met.” Pro-active communication was defined as a “positive influence on what we’re seeing as far as [ROI process] change initiatives” are concerned. Respondents were emphatic about the need to “keep it simple” when communicating with stakeholders about the ROI Methodology™ in order to counter lack of understanding, “baggage,” and fear about the process. Additional comments included the following:

The methodology was absolutely critical...Did we go around talking about it all the time, the ROI process? I will tell you we did not and we didn’t because everybody I have ever met, who has ever done any kind of measurement at all, had some kind of baggage around it...So because of that, we really didn’t talk a lot about the ROI process and we absolutely discouraged people from talking about levels. We didn’t want that methodology to create some new language that would do nothing but turn off our business partners.

Other respondents emphasized the need to customize messages by focusing on “relevant, practical” information that stakeholders and decision makers wanted to hear:

I really don't get into methodology with my stakeholders. They are very interested in asking for...business results, 'show me how you're impacting my business', but I don't explain it to them. I don't go into detail about the methodology and how it works. You have to explain a little bit. These folks understand ROI. It is one of our business matrixes here. ROIC - the ROI of our capital spent. That is one of our key matrices that we are measured to day in and day out. These folks get that, but I don't walk them through all of the intricacies of all of the levels, one, two, three, four...That is much more detailed, as least for the folks I have to deal with, [than] they want to know about.

Theme Seven: Implementation and Integration

Current evaluation and change process literature emphasizes key success factors related to effective and sustainable implementation efforts, including a detailed plan, capable, committed resources, and adequate funding and staffing, among others. The same implementation factors were also commonly cited by participants as having a significant influence on initiating, maintaining, and sustaining the ROI process.

Sub-theme: Implementation roles and responsibilities. All participants identified multiple, overlapping roles associated with "bringing the methodology to the table" -- on both an individual project level of implementation as well as on a level of "embedding" and implementing the ROI Methodology™ process, standards, and system into existing infra-structures for "meta" sustainability. Significant and common evaluation roles include the role(s) of champion, advocate, strategist, implementer, project manager, business partner, consultant, educator, catalyst, change agent, process helper, and subject

matter expert. For example, “We are seen as leaders and champions in this field.” Other comments included:

I was and internal learning consultant responsible for writing the learning strategy for the University, the measurement strategy, and implementing our first ROI study as it related to a sales program. My role was really the main champion, even though the CLO was on board as the sponsor, I was the main champion, the main driver and really the project lead, if you will, for the first, and all of 2009 as we did the first pilot and the first steps of making this [ROI process] happen.

Others spoke of how evaluation roles evolved as the ROI Methodology™ began to take hold in the organization.

My initial role with the measurement side of our work began as an ROI Coordinator. At the time our organization had one ROI Coordinator which was myself, a new role, and one evaluation or measurement coordinator which had been an existing role for quite some time and as the person retired...I ended up assuming both of those positions...which encompassed the analysis, need assessments and evaluation, which included ROI.

Sub-theme: Implementation planning. “Sometimes you try to implement too much too quickly.” In various and often concurrent capacities as an evaluation lead, project manager, department head, subject matter expert, consultant, and/or mentor, participants all described the need for manageable, realistic, and “flexible” implementation strategies, that “start small” on a “pilot” basis and include strategies for managing expectations. ”You also need to be realistic. I think, off the bat, if I look

back, selecting five programs was probably too much.” Others stated:

You also need a learning culture that is flexible. It was a tough environment... the Learning Director...wanted results quickly and it all went downhill from there.

Another respondent described how a flexible implementation approach enhanced sustainability and broad-based organizational support for the ROI Methodology™ in her business environment.

Probably the thing we did that I am most proud of is...customizing the model and internalizing it and making it our own...taking the ROI methodology and customizing it...So now it is our model that we have customized for our purposes and our language.

Sub-theme: Operating standards. Many participants stressed the importance of incorporating and communicating operating standards as part of an implementation strategy in order to “show value in the methodology beyond just being consistent and getting people to actually adopt it” but also as a way of “stressing... we were going to have guiding principles and this process...[to] govern the way we did [evaluation] work.” Other comments included the following:

The methodology has been...an absolute critical part of our strategy because of what we wanted to be able to do...whether you were measuring training and development of tellers in the retail side or whether you were measuring sales training for 20 year seasoned, very senior level sales folks in a complex business unit ...or whether you were measuring a new hiring

program for associates in some other part of the company, we wanted to be able to have a consistent approach...so that we truly did have apples and apples, not so that we could compare one with another to see who was better, but just so that whenever we talked about measurement or evaluation, we really knew that we were approaching it with a consistent approach, producing consistent results, [and] that there wasn't any funny business or faking the books as you will, to contrive something. So methodology is critical from that perspective.

Sub-theme: Integration (compatible infrastructures). Compatible infra-structures (human, social, political, technical, environmental, financial) were uniformly discussed as a both a characteristic of sustainable ROI process implementation as well as a key success factor in implementation planning and execution.

Had we just used 'THE' ROI process it wouldn't have been enough for what we were trying to do. Which is why we had to integrate it with the business processes of the group... the criterion referenced instructional design process... that and then the Robinsons' consulting practices around performance consulting and assessment [for] really digging in to do Performance Analysis and not 'just' training needs assessment.

Conversely, the absence of compatible infra-structures was described as a common barrier to effective and sustainable ROI process implementation. As stated below:

I think one real barrier that existed in our organization...is that we were almost crippled by our learning system, our learning management system.

Every time it felt like we wanted to get...level 1 and level 2 data that was supposedly reportable from this learning management system, and it never was an easy process. So if I could summarize a barrier at that time, [it] was really our automated system...[our] technology.

Other comments about infra-structure requirements included:

[Our] biggest initial barrier was we were almost too early for our own good and what I mean by that is we jumped to ROI without really having a solid base of measurement and evaluation within our organization 11 years ago. So while that was a success strategy at the same time, what ended happening initially was, over time, I realized a lot of people associated evaluation with ROI and it was perceived as very complex. Therefore all of the evaluation seemed complex and it took us several years...to unpackage the ROI methodology from other lower level evaluation. It doesn't sound like that would be such a barrier but it has been a pretty big factor to overcome in some instances.

Sub-theme: Implementation barriers. “Old school thinking”, fear, “lack of understanding”, unrealistic expectations, and marginal sponsorship were commonly cited barriers to initiating, maintaining, and sustaining the ROI Methodology™. Sample comments included:

Any time you first introduce something new to an organization, the organization's first response is to spit it out...if you are introducing change from the middle of the organization, then it requires that the person who is carrying that banner to stay focused and committed to the change, in spite of all of the obstacles and barriers that they are going to face.

Many identified implementation barriers in terms of “waxing and waning” organizational support due to “ROI bashing” from vendors or competitors, the search for “the next new thing” in evaluation methodology, and/or perceived limitations in the ROI Methodology™ due to concerns about isolation techniques associated with the Methodology™.

Other comments included:

The competition for the ROI methodology is getting I think more robust with return on expectation... With lots of statistical analysis programs out there, there are companies who are going out there with extremely complicated models and people are getting excited about that because...this is the fresh new way to go...it is new, fancy, it is like comparing an i-phone to a Newton. So I think that becomes an issue.

Most participants agreed that sustainability required ongoing advocacy, education, and persistence “in the face of barriers” because there are always “a lot of people out there who don’t buy into it [ROI].”

Sub-theme: Implementation support and follow up. Many participants described the need for immediate, intermediate, and long-term implementation in the form of leadership endorsement, support from immediate manager(s), and environmental supports, such as “enabling systems” and “level setting of expectations”, to help keep ROI process implementation on track. Follow up support was described as a significant theme in both the implementation and sustainability of a single HRD intervention as well as in the implementation and sustainability of the ROI Methodology™ as a performance

improvement and measurement system for collecting, analyzing, reporting, utilizing, and learning from results data generated from multiple applications over time.

Sustainability of the process....[you've] got to be able to demonstrate not just that you can calculate an ROI, that training gets business outcomes. You have got to be able to demonstrate lessons learned about a study that [can be] brought back into the organization and replicated. In other words, if people see studies as a one-off kind of thing...it will die...

Participants also described the need for implementation support and follow up from external sources, such as the ROI Institute, peer coaches, and communities of practice. “Triggers”, “prompts”, “real life tips on implementation”, and “help desk” support were described as particularly important to early adopters of the methodology, who often struggle to introduce and implement a “new” and “foreign” evaluation approach to their workplace after ROI certification training.

Theme Seven: Dedicated Resources

The need for committed and “dedicated resources” was a common theme related to sustaining “the whole comprehensive set of processes” for ROI process implementation.

Sub-theme: Committed, capable human resources. Respondents identified multiple, overlapping roles, skill-sets, and attributes associated with the capability requirements for sustainable ROI process implementation. Most emphasized the dangers of implementation becoming “person-dependent” or over-reliant upon a single resource, advocate, or champion. As one respondent stated “Multiple people need to have the skill

to do it.” Individuals’ capacity and motivation was also addressed as a key factor influencing human resource effectiveness. Specifically:

Everyone had an opportunity to participate...The first people...were those that we would call education service representatives, which are liaisons from our organization to our client group. The few handful of three or four of them that volunteered to take the training and do a few studies within their client organizations tend to be the same few people, looking back over the years, who tend to be more forward thinking, take on those extra assignments that they see are valuable for their clients and are often called upon for special projects and leadership roles. They also...represent the three or four regions that often win those Baldrige Awards. So they are often more forward thinking and embrace that kind of accountability for their stuff. They are intrinsically [motivated]...it’s the personality of those few folks who are always wanting to bring something new to their customers...

Another respondent described how employee motivation caused some individuals to “come forward” and solicit results data as a way to “differentiate” themselves in a highly competitive sales environment where “trying to get promoted” was the norm.

You had people knocking down the door saying I want to use this as a way to differentiate myself. I am the product trainer...I am competing...I want you to show me where the holes are in my department...and I want you to help me fix them.

Employee motivation was also addressed as a restraining force and

barrier to establishing credibility as a proactive business partner, evaluation consultant, advocate, champion, and/or project manager. “It takes so much commitment from the person who is championing, not to get discouraged and to keep going.” Other comments included:

There are some people who bring the ROI into the organization [thinking] this is the way I can ahead...they use it [ROI] for the wrong reasons and it gets a bad name because of how somebody uses it.

Other comments revolved around the influence of environmental supports and incentives for employees’ use of results data. “I was a one-man show, so my resources were basically me...the break-down [for resource support] came at the line manager level...and the senior level...didn’t use their influence to push it through...when the line manager pushed back...the senior level backed off and said okay”. Additional comments included:

If the results stunk then he would take the results and shred them and we would look together and figure out a way to make his better. If they looked well, then he would run them down the hall to his boss and say ‘why am I not being promoted?’ That’s ultimately what he did. Two months later he got the manager job he wanted.

Sub-theme: Capacity building. Many respondents commented about the need to leverage both capable and committed resources. Building evaluation capacity through continuous education and development was frequently described as an implementation issue. “For most, this...[is] not 100% of their job, [it is] 10% of their job, [or] 25% of their job...a couple of lines on their job description.” Many spoke about the prevalence

of using subject matter experts, peer coaches, and other “business unit” personnel as a “core team” of evaluation partners or champions in light of economic conditions characterized by “trimming the fat” and growing resource constraints. “We had five teams...a core team...each one had a different program [to] evaluate...We got them educated and trained, working through the process.” Other comments included:

Education is real important...We did webinars...we had [a consultant] come in...we had a global learning network conference...the learning professionals eventually tend to get it, the subject matter experts are a little bit harder to sell because they don’t understand the...overarching learning and development profession, how good instructional design works, how good delivery works. They have the feeling that anybody can be a learning person.

Theme Eight: Readiness and Change Management

Respondents spoke consistently about change issues prevalent in their organizational environment and many characterized the business conditions in which they worked as “chaotic” and “constantly churning.” These change conditions were described as a key factor influencing both “front-end” adoption and implementation of the ROI process as well as sustainability of ROI process implementation. “The timing has to be right. Is the organization ready as far as maturity...championship and sponsorship?” One participant stated that her organization applied a uniform and customized change management approach for all project initiatives and advocated the use of “a readiness assessment” prior to ROI process implementation. Other comments included:

Change management was a real issue...There were changes in leadership.
There were changes in focus. There were changes in the organization.

We started with one Senior VP and at the end of it we were with a different Senior VP, or one entire line of business would now be aligned to a completely different side of the business. It was a very tumultuous time. For myself, if I could just give you an example, I was with... the University for two years. My job changed 3 times. I was constantly being aligned to new lines of business. I was told that if I had success in one line of business, maybe I could replicate that success in another line of business. Again, it is almost management through chaos...I think change is critical to any organization, so if you don't change, you don't succeed. However it almost felt that there was too much change, at any point, at that University.

Research identifies predictable organizational and individual change responses to complex change conditions in a business environment. In addition, evaluation research identifies specific change responses associated with implementing and embedding the ROI Methodology™ including: fear of accountability; fear about learning new evaluation techniques; and fear of consequences about how performance data will be used, among others (Phillips et al., 2006; Phillips & Phillips, 2007a; Preskill & Russ-Eft, 2005). These change issues were echoed by participants. For instance, many respondents gave examples of fear responses associated with increased demands for accountability during ROI process implementation.

There were an awful lot of people in the sales training department who felt like they were walking on water when it came to training and everybody looked at them as being just fabulous at their jobs. But when suddenly they [leadership] wanted...data, they [trainers] were scared to death.

Others spoke about the need to manage expectations in the face of perpetual changes in leadership, focus, or strategic direction. “True level setting of expectations by that Executive Team” is critical, said one participant. Other comments included:

Secondly, from the change management standpoint I think there has to be much more standardized expectations. I had a class awhile back and [the manager said] ‘I have to measure these two programs and have them done by the end of’...like three weeks. The manager really thought that that was reasonable! I said ‘you are not even going to have the data measurement tools in place...’

There was a lot of shift in leadership, there was a lot of slimming down, trimming the fat, as they said. So a lot good questions were being asked, good programs were being implemented. Unfortunately with any change, there was also a lot of casualty and also some radical decisions that were made that unfortunately always sort of backfired, in my opinion, especially in the learning organization.

Theme Nine: Utility of Results Data

Sponsors, stakeholders and other client groups typically have unique and divergent perspectives about the “relevance” of results data. Participants described challenges with presenting and promoting results data to stakeholders with different levels of expertise, different concerns about dissemination of information, different “political” agendas, and different preferences for receiving information. “If I had to do it all over again, we would start from the bottom up and also give real time results”. Participants agreed that utilizing the ROI Methodology™ to generate “usable” results

data for stakeholders was a critical success factor towards securing “buy-in” for initial and sustainable ROI process implementation. “Give them something that’s usable.”

Other comments included:

Our clearest example and measure of success is always our continued request to help clients with doing ROI studies. We have several that ask us to help them apply the process, year after year, even if we don’t always do an ROI for them, because it is not needed, they are still asking us to be at the table if they plan major initiatives that we are investing millions of dollars. So to me, that is our best example and best measure of success...

Theme Ten: Value Creation

Only one of the twelve interview participants said that they had conducted a study on the “ROI of the ROI”. According to one long-term, internally-based champion, “We never even thought about doing that.” However, the value proposition of the ROI Methodology™ was a common theme described by participants.

Specifically, many described situations in which the early impetus for adopting the ROI process was related to business pressures for showing the “economic worth” or value of functions, programs, products, initiatives, or personnel. Showing the value of the Methodology™ in terms of its “relevance” in achieving select business outcomes was presented as a success factor for initial implementation support.

However, participants also emphasized that sustainable ROI process implementation required sponsors and evaluation leaders to go beyond viewing implementation as “a one-off kind of thing” relegated exclusively to the HRD function for episodic program evaluation(s). “Sustainability of the process [means]...you have

got to be able to demonstrate lessons learned...that [are] then in some way brought back into the organization and replicated in some way somewhere other than training.”

Another respondent said, “Now we are holding the business [units] accountable for doing studies...we have a two year plan mapped out [to] try to institutionalize this.” Another offered, “We [have] shifted from working with individual projects in the field to...talking about it [ROI process] on a more strategic level...at higher level committees and planning...” Other comments included:

We were able to sustain it because we were constantly seeking ways to apply it that were relevant to somebody other than ourselves and they would tell those stories and then other people would want it because they realized that it was relevant and it added value and that is the way it expanded as it did and it sustained itself and grew and evolved because we weren’t trying to implement the ROI process. We were trying to do something that enabled training and development to add value to the business and to run the business in a way that was accountable and responsible and diligent and relevant and this was part of what enabled us to do that.

Many participants described ways in which sustained utilization of the ROI Methodology™ added and created organizational value through “evidence-based decision making,” a “performance improvement perspective,” and “advanced workforce analytics,” among others:

When you are able to do a study in an organization and you are able to educate...present the study in the right way, in the given time and present it

to the key executive group in that organization in the right way so that they understand what you really did and how you did it and the value of what you did. In other words uncovering things that you could fix that could then save the company money...[that] you can then translate to other things. If you can do that, then light-bulbs start to come on and people start to see the value of it [the ROI Methodology™].

Finally, other ways in which the Methodology™ has reportedly “made a difference” is through participants’ ability to create their own unique value propositions. “It’s made me more credible, more confident.” And in business environments where HRD staff continue to seek the proverbial “seat at the table” another said:

We have a new, this year, quality movement going on -- re-energizing, revamping, re-designing our quality and performance improvement models -- and the two camps working on that are at national, our DC office, overseeing the functions within the field. They are asking us to be at the table to contribute to that from the measurement side, so that is another example of how they have seen that [evaluation] work being integrated into our overall quality models. They do not use the word ROI, but because of the work we have done in ROI, they are asking us to lend our expertise at the table.

Theme Combinations

Respondents did not view any one theme as the sole contributor of sustainability, although the value proposition of the ROI Methodology™ in terms of its potential to both deliver *and* create value-added organizational results was the most frequently occurring

theme. A variety of theme combinations emerged from data analysis, showing the relationship between themes. The most frequent combinations included the following:

1. Business Need + Value Creation
2. Sponsorship and Leadership Support + Continuing Education
3. Internal Support + Partnering
4. Partnering and Influencing + Utility of Results Data
5. Continuing Education + Readiness and Change Management + Dedicated Resources
6. Communicating for Impact + Continuing Education
7. Readiness and Change Management + Implementation and Integration
8. Implementation and Integration + Dedicated Resources
9. Dedicated Resources + Internal Support
10. Utility of Results Data + Value Creation
11. Value Creation + Business Need + Utility of Results Data

A structured account of the main themes, or combination of themes, presented by each participant is provided in Appendix K.

Research Gaps and Development Needs

Participants were also asked to identify perceived gaps and future research and development needs in the field of evaluation and ROI. General comments included the following:

- The whole comprehensive set of talent processes and solutions...the way that we design and develop and deliver talent solutions and...using the ROI methodology to approach those issues... I don't think there is a lot of work on all of that.

- A help desk of some kind for the ROI methodology...I had...help with my first two big studies...on and off, on and off. ROI, it's implementation and then sustainability....If we don't fix the implementation part of it first...[if] people who come out [of certification]...[and] they don't go out and actually implement...[we will] be lucky if one person sustains it. That whole transfer piece that helps us like the coaching, holding the hand...the confidence level is really low when people leave the safety net of ROI training.
- A standardized tool...that could become the gold standard for evaluating ROI data
- Maybe more clear, concrete, cleaner case study examples that people could use...maybe a project they're working on, how to do it.
- Ways to use ROI for more comparative analysis. Individual tracking of performance instead of just group or regional performance...getting organizations to track individuals by hard data, like sales by individuals instead of sales by region or by department.
- How to do it faster, better, cheaper. How to help people get up to speed. How to help people do it [ROI evaluation] within budget when budgets are tight. Sending people to 5 days of training [with budget constraints] is out of the question.
- Research on how much of adult learning is influenced by biological or personality factors, how much is influenced by education and training. How to do ROI on blended and just-in-time approaches...how to put the right package together. More comparative analysis.
- I think when you go through...the course in ROI, it [is] very new and it is somewhat foreign...So then you come away from that and [if] you don't go and do real life

[projects], to me that is kind of where the gap [is]...I felt like I needed some triggers so I got my big book out and that's where things [began] to come through here and there, looking at some of the material and how...it [applies] to real life situations...So I guess maybe materials...a newsletter...prompts...that would just say 'here's some real life tips on implementation.'

- Maybe more comprehensive level 3 evaluations in order to really know what people are doing, why they're doing it and how they're doing it.
- Looking towards the future if we could just figure out how to do it quicker, better, faster that would be a great benefit obviously. I think if we can figure out how [to] apply this in a way that it does not appear to be [solely] for the [benefit of] the training department, focus more on transfer strategies...[and] start to show that [the Methodology] can be replicated...
- I will tell you the only issue coming up recently has been 'is the Kirkpatrick and Phillips...model, the levels...[are they] the right model any more, have we outgrown their need, are there better models?' We...have...recently developed an educational research line and we have not tapped into it too much yet, but that is one of the driving questions, 'what are the most effective models?' It seems strange to ask that now, but it is definitely the question surfacing more and more. At a major human resource committee meeting someone brings an article that the levels of evaluation are no longer relevant. Now they didn't bring the millions of articles that support it, they just brought the one that said it wasn't. In the model itself, the efficacy and sustainability of it, is really quite honestly our focus, I would not have thought that a year ago, I would have said other things, but that is our current questioning.

- You need to communicate for impact. When I have presented studies, when I have spoken with others, when I have reached out, when I have been solicited to consult on a project, and I'm not saying I am perfect at this... but... What I have always heard is that I have a way of describing or communicating the importance of measurement and evaluation and I have a way of putting ROI into words which are very matter of fact and practical. I have heard that time and time again. I would unfortunately watch other presenters make the mistake [of getting] right into the terminology, right into the lingo of ROI and the use of some of percentages and numbers and isolating and all of these words that are our own jargon...but that put off a person who is first trying to understand this. Especially if you're presenting to Human Resource folks. So how do [we] present to these folks to make it real for them...so that it makes sense to people hearing this for the first time. I would say that we need to learn how to communicate for impact. Make it matter of fact, make it simple and start from there.
- More practical tools and 'success stories.' Case studies are only a one time snap-shot. How to keep momentum, especially when [the ROI expert] leaves the organization...the methodology goes with [them].
- I personally don't see any gaps. My perspective on it is that the ROI process has enabled us to truly implement a business process. Not a HR process, a business process, and it's why we selected that over the some of the other ones. It enabled a flexible applicable with consistent results. It gave us tools, and approaches and techniques that enabled us to really develop credibility with our partners instead of doing what I had been a part of in the past, not so much measurement, but anyone who has been in HR has had experience at least once, but many times that you're just

sort of showing up and they look at you as if you have three heads because you're not speaking that language and you don't develop credibility in that sort of scenario. The ROI process for us I think really helped us to show up with results that business leaders could relate to and I don't see any gaps in it.

Summary

The purpose of this sequential, mixed methods research is to describe characteristics of sustainable ROI process implementation and to explore the degree to which a planned change process contributes to sustainable implementation. Participants in both the qualitative and quantitative phases of research identified a variety of factors and themes related to successful and sustainable ROI process implementation. There was consistent agreement among groups about themes, factors, and characteristics of sustainability, including implementation success factors and implementation barriers. However, some differences emerged around the degree to which participating organizations have been able to sustain success factors and counter implementation barriers. In the next chapter, the relevance of these findings will be discussed and compared to the literature on the enablers and barriers associated with initiating and sustaining a mature, comprehensive measurement and evaluation system.

CHAPTER V

FINDINGS, CONCLUSIONS, AND IMPLICATIONS

Introduction

The purpose of this study is to identify and explore characteristics of sustainable ROI process implementation in HRD practice with organizations that have had experience implementing the ROI Methodology™. This chapter integrates and summarizes findings from the quantitative and qualitative phases of research, compares findings to results of similar research conducted about training evaluation, change management, and sustainable measurement and evaluation systems, offers a framework for ROI process maturity, and discusses the implications for further research and professional practice.

Summary of Study

The demand for accountability through measurement continues to increase in federal and state agencies, foundations, and nonprofit programs, especially in light of increased costs for programs and initiatives. These trends have heightened application and use of the ROI (return-on-investment) Methodology™ as an essential part of human resource development and program evaluation in both private and public sector organizations. Although progress has been made towards identifying common elements in successful ROI process implementation, sustainability of the ROI process model is an aspect of implementation that is often overlooked and under-estimated.

This mixed method research focuses upon determining the characteristics of sustainable ROI process implementation and is intended to guide leaders and practitioners in assessing the ongoing readiness needs, change issues, environmental

complexities, and resource challenges associated with sustainable development and deployment of the ROI process model. The research objectives build upon existing studies regarding the applied use of the ROI Methodology™ and draw upon previous, scholarly research around results-based measurement and evaluation systems, organizational change processes, capacity building, and sustainability. Four Research Objectives were tested and addressed by linking quantitative and qualitative data collection and analysis:

O₁: Compare the association of sustainable ROI process implementation and the associated degree to which a planned change process is applied to implementation.

O₂: Compare the impact of Context, Capacity, Capability, and Change Process factors upon the degree of ROI Methodology™ sustainability.

O₃: Describe characteristics of sustainable ROI process implementation.

O₄: Compare the association of sustainable ROI process implementation and the number of barriers associated with ROI process implementation.

The target population for this research project is public and private sector organizations in the U.S. that have offered ROI Methodology™ training to its employees. The sample population is drawn from membership lists provided by the ROI Institute. These professionals represent directors, managers, professionals, consultants, specialists, instructional designers, trainers and vendors in the training, HRD, organization development, or performance improvement field who have achieved, or who are in the process of achieving, ROI certification. In addition, the sample included those individuals who may not be certified but who demonstrate commitment to the ROI Methodology™

by virtue of active involvement in the ROI Institute SharePoint Community of Practice, among other related, web-based professional communities of practice. The survey instrument used for quantitative data collection is adapted from a composite of surveys used in similar research and focused on identifying characteristics that enable or impede sustainable ROI Methodology™ implementation. The survey instrument was analyzed for reliability using a Cronbach's alpha numerical coefficient of reliability. The survey used in this research shows an overall raw alpha of .95, with 0.70 being considered an acceptable reliability coefficient (Nunnally, 1978). Using Dillman's Tailored Design Method (2000) as a source in developing a data collection strategy, the web-based survey was offered to 780 HRD practitioners, consultants, and evaluation professionals. After eliminating undeliverable invitations to participate and those no longer in an evaluation role, a population size of 629 remained. The survey achieved a response rate of 140 (22%). Demographic information was collected including type and size of organization, annual training budget, job title, number of years in the HRD profession, gender, and academic preparation.

Quantitative Research Findings

In keeping with Creswell and Plano Clark's (2007) recommendations for reporting mixed method research findings, findings are presented and organized around the two distinct, sequential phases of research. During phase one of this mixed method study, statistical analysis conducted led to the following findings.

Research Objective One

Research Objective One states that the degree of sustainable ROI process implementation is associated with the degree in which a planned change process is

applied to ROI implementation. A correlation coefficient showed a highly significant positive relationship with $r(133) = .374, p = <.001$ between the two variables. This finding supports the premise of this research by suggesting that the more a planned change process is applied to ROI Methodology™ implementation, the more sustainable the implementation is likely to be.

However, despite the proven value of a change process perspective during ROI process implementation, 69 (47.9%) indicate that implementation efforts showed “a limited perspective about change issues associated with ROI implementation (such as “employees’ fear about how result data will be used, anxiety about increased accountability”). Another 57 (39.6%) of survey respondents report that the extent to which change leadership strategies are applied to implementation is “Limited” and 50 (35.7%) indicate that the extent to which leaders “effectively prioritize overlapping change projects” is also “Limited.” In addition, 47 (33.6%) indicate that the extent to which leaders “assess the overall impact (ie. upstream, downstream)” of organizational change before going forward is “Limited.” The change pattern factor with the highest mean is “complex change projects require approval at multiple management and leadership levels” at 3.72 (SD = 1.474). The change pattern factor with the lowest mean is “leaders effectively prioritize overlapping change projects” at 2.29 (SD = 1.202).

Research Objective Two

Research Objective Two states that the degree of sustainable ROI process implementation is associated with an organization’s degree of change response and capacity. A multiple regression analysis was conducted to determine if Context, Capacity, Capability, and Planned Change Process factors could predict sustainability. The linear

combination of predictors in the model was significant in predicting sustainability, $F(4, 130) = 20.23, p < .001$. $R^2 = .62$ which indicates approximately 62% of the variance in sustainability is explained by its linear relationship with Context, Capacity, Capability, and Planned Change Process variables. A summary of the regression coefficients shows Capability at .322, Context at .187, Capacity at .107 and Planned Change Process at .086. Based on the Standardized Beta Coefficients, the strongest predictor was Capability and the weakest was Planned Change Process. All predictors had a positive impact on sustainability.

Research Objective Three

Research Objective Three seeks to describe characteristics of sustainable ROI process implementation. Frequencies, percentages, and descriptive statistics were used to identify characteristics of sustainability. Characteristics included critical components of mature, sustainable results-based measurement and evaluation systems that have been identified in previous research (Kusek & Rist, 2004; Mourier & Smith, 2001), including: sponsorship; internal support; resource allocation; operating standards (governance); resource allocation; clear roles and responsibilities; utility; effectiveness; efficiency; and accountability. Other indicators of sustainability included familiarity with the ROI process based upon years of implementation experience and the degree of integration of the methodology based upon the extent to which results data generated from use of the ROI Methodology™ adds overall value to the organization in terms of the following factors: credibility of the training or HRD function; alignment of the training or HRD function to strategic business needs; efficiency of solution design, development, and/or delivery; effectiveness of solution design, development, and/or delivery; quality of

solution design, development, and/or delivery; increased support from key stakeholders; policy decisions about performance practices, resources, and/or rewards; processes used to track employee performance; processes used to track organizational performance; institutional knowledge-sharing; and an enhanced culture of accountability.

Descriptive statistics for variables used to analyze the perceived organizational value of the ROI Methodology™ show that the mean for “quality of solution, design, development, or delivery ” is highest at 3.99 with a SD of 1.128, closely followed by the means for “alignment of training, HRD solutions to strategic business needs” at 3.91 (SD = 1.110) and “effectiveness of solution, design, development, or delivery at 3.91 (SD = 1.202). The area of perceived organizational value with the lowest mean is “policy decisions about performance practice, resources, or reward structures” at 3.29 (SD = 1.193). All responses about perceived organizational value of the ROI Methodology™ are provided in Appendix I.

Research Objective Four

Research Objective Four states that the degree of sustainability with ROI process implementation is associated with the number of barriers associated with implementation. A correlation coefficient was used determine the relationship between the two variables. The analysis showed a non-significant negative relationship with $r(133) = -.136$, $p = .116$. Therefore, no interpretation should be made of the positive or negative relationship since it is statistically equal.

In addition, participants were asked to identify the most frequently occurring barriers to ROI process implementation. More than half of survey respondents, 101 (70.1 percent), indicate that “conflicting, competing business priorities/demands” frequently

pose a barrier and “detract from ROI implementation focus.” Other frequently cited barriers include: insufficient resource allocation (people, money, materials, tools, technologies); sponsors’ focus, commitment becomes diverted during implementation; poor assessment of organizational readiness to meet new demands; and ineffective sponsorship during project start-up.

Qualitative Research Findings

In keeping with Creswell’s (2003) recommendations for qualitative research procedures, a semi-structured interview protocol for collecting and recording information was applied. The interview protocol included key research questions, which were pilot tested and applied uniformly to each session. This is an approach well documented in the literature (Creswell, 2003; Denzin & Lincoln, 2000). A total 21 individuals were purposively invited to participate, 13 volunteered, 7 did not respond to the invitation, and one was not able to complete the interview process due to scheduling difficulties. Given that professionals who attempt to implement and sustain the ROI Methodology™ in an international environment may experience unique contextual issues, cultural challenges, or constraints, individuals responsible for ROI implementation in organizations outside of the US were eliminated.

Interview data was organized using an Affinity Diagram process. Approximately 57 factors related to sustainable ROI process implementation were first identified and sorted into related groups. Groups were based upon the link among ideas as evidenced by words or phrases conveying the same meaning. Meanings and relationships related to relevant research questions were highlighted, grouped into themes, subthemes, and coded by the researcher and two external auditors who helped analyze data for central themes

(central phenomenon), repetition of expressions, key terms, instances, or accounts, and relationships between significant expressions (Glaser & Strauss, 1967). The auditors also checked for researcher bias in the coding process.

Recurring Themes

Recurring themes that were consistent among participants and consistent with the research questions included the following:

1. Business Needs
2. Sponsorship and Leadership Support
3. Internal Support
4. Partnering and Influencing
5. Continuing Education
6. Communicating for Impact
7. Implementation and Integration
8. Readiness and Change Management
9. Dedicated Resources
10. Utility of Results Data
11. Value Creation

Theme Combinations

Respondents did not view any one theme as the sole contributor of sustainability, although the value proposition of the ROI Methodology™ in terms of its potential to promise, deliver *and* create value-added organizational results was a frequently occurring theme. A variety of theme combinations emerged from data analysis, showing the relationship between themes. The most frequent combinations included the following:

1. Business Need + Value Creation
2. Sponsorship and Leadership Support + Continuing Education
3. Internal Support + Partnering
4. Partnering and Influencing + Utility of Results Data
5. Continuing Education + Readiness and Change Management + Dedicated Resources
6. Communicating for Impact + Continuing Education
7. Readiness and Change Management + Implementation and Integration
8. Implementation and Integration + Dedicated Resources
9. Dedicated Resources + Internal Support
10. Utility of Results Data + Value Creation
11. Value Creation + Business Need + Utility of Results Data

Integration of Quantitative and Qualitative Findings

The objective of this study is to identify and explore characteristics of sustainable ROI process implementation in HRD practice with organizations that have had experience implementing the ROI Methodology™. The purpose of using a mixed method research design is that both qualitative and quantitative research, in combination, provide a better understanding of a research problem or issue than either research approach alone (Creswell & Plano Clark, 2007). In addition, a mixed method approach allows for a wider range of perspectives and a more comprehensive understanding about a phenomenon or issue than quantitative methods alone will allow (O’Cathain, Murphy, & Nicholl, 2008).

As previously shown in Figure 3.1, both quantitative and qualitative stages of data collection and data analysis were given equal priority and integration occurred at the

data analysis and interpretation phase. Table 5.1 shows how both the quantitative variables and corresponding questions and the qualitative questions and corresponding themes were analyzed to present an integrated interpretation, conclusion, and summary of findings. Specifically, qualitative findings expanded upon qualitative data sets to present a fuller, more elaborate picture of the characteristics associated with sustainable ROI implementation in HRD practice (Creswell, 2003).

Summary of Findings

Results from integrated qualitative and quantitative findings provide evidence of the relationships between the variables defined in the four Research Objectives. There was consistent agreement among groups about themes, factors, and characteristics of sustainability, including implementation success factors and implementation barriers. However, some differences emerged around the degree to which participating organizations have been able to sustain success factors and counter implementation barriers. For example, key differences around such characteristics as sponsorship support, utility of results data, reporting and tracking of results data (especially to senior leadership), resource allocation and development, and maturity of evaluation experience and implementation practice, were evident among those survey respondents with one to three years implementation experience (the majority) compared to interview respondents with seven or more years experience. Specifically, quantitative respondents confirmed agreement about characteristics of ROI process sustainability, but reported less frequent opportunity or experience in implementing sustainable evaluation practice.

Table 5.1

Table for Integrating Quantitative and Qualitative Data Analysis and Interpretation

SUSTAINABLE ROI IMPLEMENTATION				
Variables (Quantitative)	Research Objective One	Research Objective Two	Research Objective Three	Research Objective Four
	Planned Change Process (A4b-g; C9a-h, j-l)	Context, Capability, Capacity, Planned Change Process	Characteristics (QA1a-k; A2a-g; A3a-d; A4a-f; E20a-g)	Number of Barriers (A4f; B5b-k; B6-a-h; B7a-d; B8a- f; C9i)
	<ol style="list-style-type: none"> Organizational support cyclical Business environment volatile Ineffective change leadership impacts sponsor focus, resource allocation, performance expectations Implementation plans do not address change, risk issues 	<ol style="list-style-type: none"> All variables predictors of sustainability <ul style="list-style-type: none"> Context (business environment - QA1a-k) Capability (aptitude, resources – QA2a-g) Capacity (readiness – QA3a-d) Change process (method perspective - QA4b-g, QC9a-h, j-d) 	<ol style="list-style-type: none"> Alignment to business need, linked to strategic objectives Sponsorship (ongoing) Internal support (enhanced partnerships) Utility Value adding, value creation Accountabilities in place Effective implementation planning & follow up Education & training Defined evaluation roles 	<ol style="list-style-type: none"> Competing, conflicting business needs Leaders don't prioritize conflicting needs Insufficient resource allocation Sponsors, leaders lose focus Inadequate internal support Ineffective tracking of implementation progress

Table 5.1 – *Continued*

SUSTAINABLE ROI IMPLEMENTATION				
	Research Objective One	Research Objective Two	Research Objective Three	Research Objective Four
Themes (Qualitative)	Planned Change Process (Q10, Q11)	Context, Capability, Capacity, Planned Change Process (Q1, Q3, Q6, Q13)	Characteristics (Q2, Q4, Q5, Q7, Q8, Q12, Q14)	Number of Barriers (Q9)
	1. Change readiness, management <i>Organizational maturity, timing; organizational support cyclical Business environment volatile, too many changes performance expectations</i>	1. Context: <i>Business alignment, utility, incentives, culture</i> 2. Capability: <i>Dedicated, trained, educated resource allocation; compatible infrastructures; continued education/training/ competency building</i>	1. Business needs <i>Relevant, aligned with strategic objectives, usable, delivering adding, creating value</i> 2. Sponsorship <i>Start-up, ongoing Accountabilities in place</i>	1. Too many changes divert ROI process implementation focus ("chaos management") 2. Poor assessment of organizational change readiness

Note: Adapted from "The Quality of Mixed Methods Studies in Health Services Research" by A. O'Cathain, E. Murphy, & J. Nicholl, 2008, *Journal of Health Services Research Policy*, April.

The relevance of these findings were discussed and compared to the literature on the enablers and barriers associated with initiating and sustaining a mature, comprehensive measurement and evaluation system. Based on the literature and previous studies conducted on training evaluation, change management, and sustainable implementation practices, a conceptual framework was developed. This framework, shown in Figure 5.2, suggests that if a) organizations perceive ROI implementation as a relevant means to inform investment decisions, increase strategic alignment of HRD services, and improve performance outcomes; b) leaders appropriately assess the environmental, political, and cultural contexts in which the measurement and evaluation system is meant to function; c) project teams develop systemic, holistic implementation plans with a long-term versus an episodic view; d) project leaders integrate a planned change process into implementation planning and practice; and e) executives and stakeholders maintain focus and commitment to implementing and integrating the Methodology™ in the face of competing demands for time and resources, then the overall capacity of the organization to develop, deploy, and sustain a credible, flexible, results-based measurement system, that adds and creates value and is responsive to changing needs and complex environmental conditions, will increase. Based on findings from this study, the conceptual framework holds true.

In addition, the majority of survey respondents, 69 (47.9%) indicate that implementation efforts show a “Limited” perspective about change issues associated with ROI implementation and 101 (70.1%) indicate that “conflicting, competing business priorities/demands” are frequent barriers that “detract from ROI implementation focus.” Finally, unique findings from this research include increased support for the concept of

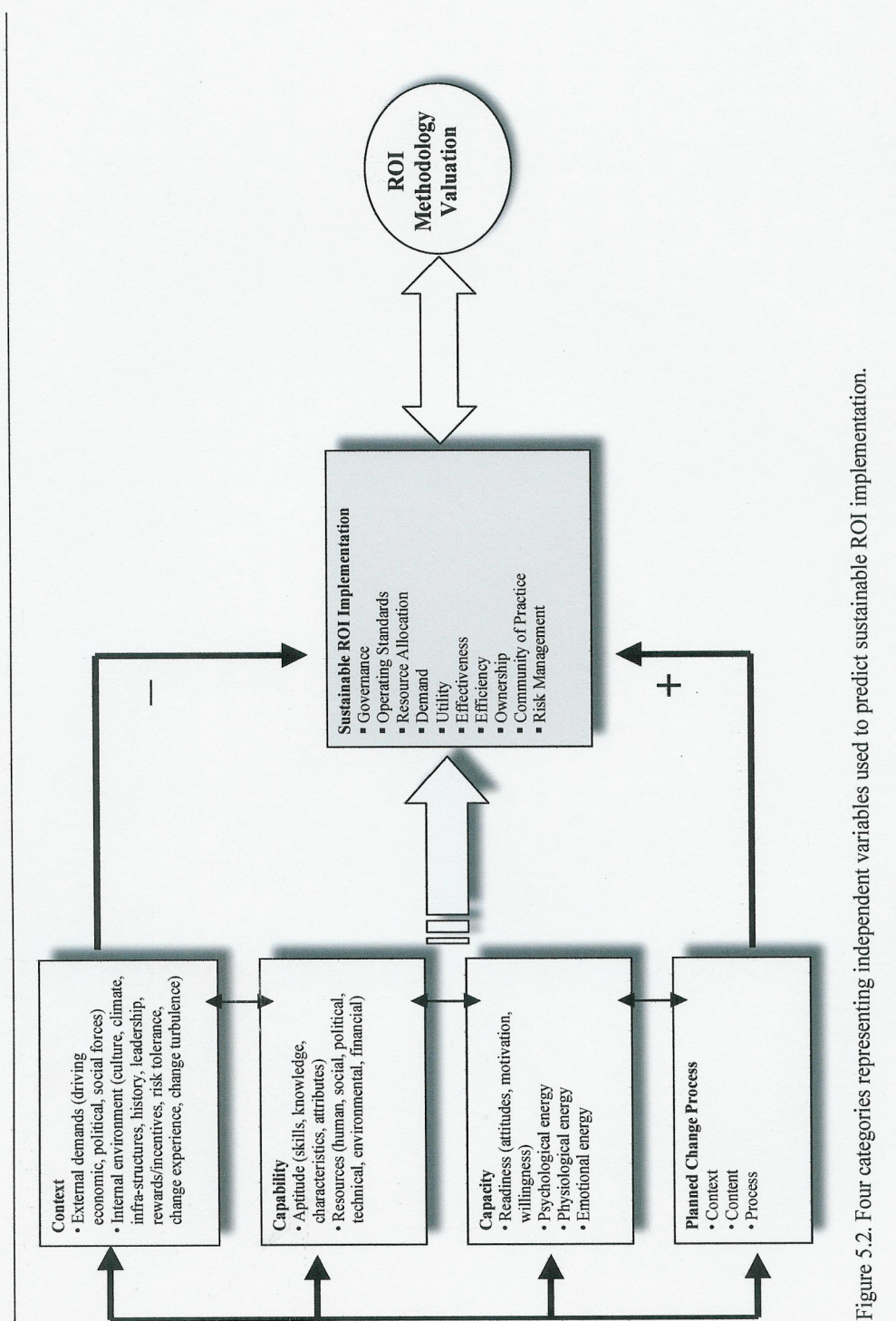


Figure 5.2. Four categories representing independent variables used to predict sustainable ROI implementation.

an evaluation maturity model based upon interdependent dimensions of [ROI] process and practice maturity and stages of organizational change response (Burkett, 2008; Burkett, 2007). Findings suggest that the more mature and embedded the ROI process is in an organization, the more resilient the process and practice is to environmental risks associated with change and/or internal threats associated with episodic barriers to implementation.

Conclusions

Conclusions and implications are drawn from integrated analysis of quantitative and qualitative findings. Statistical analysis of the four Research Objectives in phase one, combined with thematic analysis of data that emerged during phase two of this research study, answer the following critical questions: 1) What is the relationship between a planned change process and sustainable ROI Process implementation? 2) To what extent do Context, Capability, Capacity and Change Process factors predict sustainability of ROI process implementation? 3) What are characteristics of sustainable ROI process implementation? 4) What is the relationship between the number of barriers associated with ROI process implementation and sustainability of ROI process implementation? Conclusions to those research questions are as follows.

What is the relationship between a planned change process and sustainable ROI process implementation?

Statistical analysis in phase one showed a highly significant positive correlation between the frequency with which a planned change process is used in ROI process implementation and the degree of sustainable ROI process implementation. This finding supports previous research by suggesting that the more planned change strategies are integrated with a comprehensive process improvement implementation, the more

sustainable the implementation is likely to be (Anderson & Anderson, 2001; Appleby & Tempest, 2006).

The majority of participants in both quantitative and qualitative phases of research gave consistent accounts of complex change issues associated with respective stages of adopting, implementing, maintaining, and sustaining the ROI process. In the qualitative phase of research, change readiness and change management emerged as a key factor and differentiator in influencing ROI process sustainability, with one respondent saying, “Change management is an important part [of sustainability]. Resistance is natural...a change process needs to be in place to appropriately introduce [the methodology] to individuals...to ensure the right structures are in place during implementation”.

Findings confirm the concept of sustainable ROI process implementation as a cultural and complex change process because it a) requires practitioners to conceive broad-based, new methods of data collection, data analysis, data retrieval, and data reporting, among other duties, and b) introduces evaluation procedures, routines, processes, or systems that require increased organizational accountability and transparency with respect to performance results. As such, sustainable ROI process implementation is not a single, isolated intervention encompassing one snap-shot in time. Rather, sustainable ROI process implementation represents an iterative, “full scope” meta evaluation effort where the ongoing, long-term reliability and validity of the *ROI process, outputs, and outcomes* over the life cycle of multiple formative (during ROI implementation planning, design, and development phases), summative (after each individual ROI implementation), and confirmative (after several ROI implementations)

evaluation activities occur (Dessinger & Moseley, 2006). Research participants with demonstrated expertise in sustaining the ROI Methodology™ for three years or longer, uniformly characterize sustainable ROI implementation as an evolutionary change process in which “standards and guidelines” for ROI Methodology™ application become “fully embedded” as both an enterprise-wide business process and “best practice” measurement system that can “be rolled over into other business units” besides the learning and development or HRD function. To that end, some respondents estimated that full sustainability or integration of the ROI process typically “takes 5-7 years” in most organizations.

Research shows (Preskill & Russ-Eft, 2005; Prochaska et al., 1997), and findings confirm, that the task of integrating a durable, full scope, evidence-based evaluation framework into existing programs, processes, and products is not an easy one nor does it occur overnight “Change management was a real issue...There were changes in leadership. There were changes in focus. There were changes in the organization.”

Participants in both phases of research reinforced existing research about leaders’ limitations in assessing individual and organizational change impacts, especially when attempting to maintain and sustain the ROI process as a process improvement system and strategy. In keeping with prevailing change management literature, participants emphasized that old school thinking, fear, and resistance to change should be addressed as readiness issues throughout ROI process implementation and project planning. This is also consistent with research showing that careful analysis of an organization’s systems, values, culture, and overall state of readiness is critical for ensuring that a business-improvement strategy being implemented brings expected results (Chakravorty, 2010;

Harmon, 2004; Hiatt & Creasey, 2003; Walters & Thompson, 2005).

However, despite stated needs for a change process perspective during ROI process implementation, 69 (47.9%) indicate that implementation efforts showed “a limited perspective about change issues associated with ROI implementation (such as “employees’ fear about how result data will be used, anxiety about increased accountability”). Another 57 (39.6%) of survey respondents report that the extent to which change leadership strategies are applied to implementation is “Limited.”

Findings from both phases of research confirm that evaluation project managers must understand and embody the role of subject matter expert as well as the role of change agent in order to develop strategies, methodologies, and skills necessary for becoming effective ROI champions and change leaders. As stated by one qualitative research respondent. “I was trying to introduce change from the middle of the organization. I was the chief advocate, the implementer, the subject matter expert, the strategist...I’d say 40% of my role was advocacy of the Methodology.” The change agent role is especially critical since respondents, 44 (29.9%), described “multiple, overlapping, and urgent changes” as “Significant” factors characterizing the business environment in which implementation occurs. These overlapping changes then lead to “competing, conflicting business priorities/demands that detract from ROI implementation focus”, according to 101(70.1%). Despite challenges in executing and adhering to change issues, however, research shows that the quality and effectiveness of a complex implementation or intervention is significantly enhanced by employing an explicit change process (Appleby & Tempest, 2006; Carter et al., 2004; Tesoro, 1998; Wallace, 2001).

To What Extent Do Context, Capability, Capacity and Change Process Factors Predict Sustainability of ROI Process Implementation?

Results from multiple regression analysis determined that Context, Capacity, Capability, and Planned Change Process factors were significant in predicting sustainability, with the strongest predictor being Capability and the weakest being Planned Change Process. All predictors had a positive impact on sustainability.

Capability factors include a composite of variables associated with individual employees' aptitude (skills, knowledge, characteristics, attributes) as well as organizational capabilities in the form of resources (human, social, political, technical, environmental, financial). One interview respondent commented, "Multiple people need the skill set to do it [ROI process implementation]." Another survey participant added, "I found that a lot of organizations do not want to invest the time and also they do not have the skilled people to support ROI." Resource availability and capability was a key theme in both phases of research with 49 (33.6%) indicating that the extent to which "committed resources are available throughout implementation, even with competing demands" is "Limited." It is significant that 88 (62.0%) of survey respondents describe "insufficient resource allocation (people, money, materials, tools, technologies)" as the most frequently occurring barrier to successful and sustainable ROI process implementation.

Change capacity and capability and vary greatly from one organization to another. Even organizations that experience constant change do not necessarily have change capability as a core competency. Some researchers liken capacity building to an "evolutionary" process of Maturity Alignment (Meyer, 1995). The concept of maturity

has its roots in Total Quality Management and is based upon a maturity grid that defines five evolutionary stages for adopting quality practices in an organization (Crosby, 1979). Crosby suggests that small, evolutionary steps - rather than revolutionary ones - are the basis for continuous process improvement. Since then, the concept of maturity has been refined and led to the emergence of several maturity models and frameworks in the area of process and project maturity, among others. For instance, the Capability Maturity Model (CMM) is a unique model of organizational development and change that promotes a widely accepted set of guidelines for developing high performing software organizations. Developed in the early 1980's, the CMM is based upon the concept that the quality of a software application is directly related to the quality of the process used to develop it. The CMM is a prevalent process maturity framework used to help application development (AD) increase the capability of their processes through five evolutionary stages or maturity levels, where development processes are transformed from ad hoc, undisciplined states to disciplined processes capable of predictable results.

Each maturity level is characterized by the implementation of several cluster of practices (eg. process areas) that contribute to the development capability of that level and to the overall transformation of the culture through the evolutionary improvement of its development processes. Beginning with its initial implementation in the defense industry, the CMM framework has achieved widespread support because it implements an integrated collection of management and development practices at each stage of the process improvement path. These processes build on the infrastructures established at earlier maturity levels and, subsequently, become the foundation for more sophisticated processes at the next level (Wall et al., 2005).

The concept of organizational capability as an evolutionary, developmental process is also reflected in the People Capability Maturity Model (People CMM), an adaptation of both the CMM and the Capability Maturity Model Integrated (CMMI). Developed by the Software Engineering Institute of Carnegie Mellon (2010), People CMM complements the CMMI by incorporating people management capabilities that can be used alone or integrated with existing process appraisal systems. People CMM serves to guide organizations in selecting workforce practices (i.e. compensation, competency development, training and development, performance management, organizational capability management, continuous capability improvement) based upon the current maturity level of existing practices, with the intent of steadily improving and optimizing individual, team, and organizational performance during progression through five maturity levels of workforce practice (Wall et al., 2005).

Similarly, the Center for Business Practices (CBP) in project management emphasizes that an organization's performance is directly related to its level of project maturity. In a survey to senior practitioners entitled "Project Management Maturity: A Benchmark of Current Best Practices," the CBP researched project maturity on the basis of eight measures of performance. These measures included: schedule performance, budget performance, customer satisfaction, resource allocation, optimization, strategic alignment, and estimating quality, employee satisfaction, and portfolio optimization. To determine if high performing organizations were more mature than low performing organizations, high performing organizations were compared to low performing organizations and to the overall averages. Results were also compared to similar surveys conducted in 2001. Key findings from the study indicate that improving the level of

project management maturity results in significant performance benefits, especially in customer satisfaction (30% of organizations showed more than 25% improvement). In general, the higher the level of project maturity, the better the performance in all areas measured. The biggest improvements are in risk management. Experts suggest that it takes organizations up to 2 years to progress from one level or stage of maturity to the next when implementing a complex process improvement project.

The concept of process and practice maturity as a contributing factor to development capability and overall cultural transformation is supported in change management and evaluation literature. For instance, Appleby & Tempest (2006) describe a 2 year growth process in which a multi-disciplinary implementation team “with enough authority to lead the change” generated short-term “wins” to anchor a new clinical framework into a medical culture, where it has been “continually invigorated” to proactively “address barriers and unexpected conflicts.” In evaluation literature, Isaksson and Hallencreutz (2008) propose a model for measurement system maturity based upon qualitative research with three organizations. Similarly, a “Stages of ROI Implementation” framework was introduced that reflects cyclical stages of organizational response to ROI process implementation, including stages of recognition, reservation, renewal, and integration, with integration representing maturity or sustainability of the process (Burkett, 2007; Phillips et al., 2006).

Given research findings, that framework for ROI process maturity was updated and refined, as reflected in Figure 5.2. This model represents evolutionary stages of organizational change response and ROI process and practice maturity, beginning with the Recognition stage where a “wake-up call” to prove HRD value is generated and

preliminary action to implement the methodology is taken in response to accountability demands. Phillips, Phillips, Stone and Burkett (2006) provide indicators related to each stage, along with specific tactics, or enabling strategies, to facilitate movement from one stage to the next.

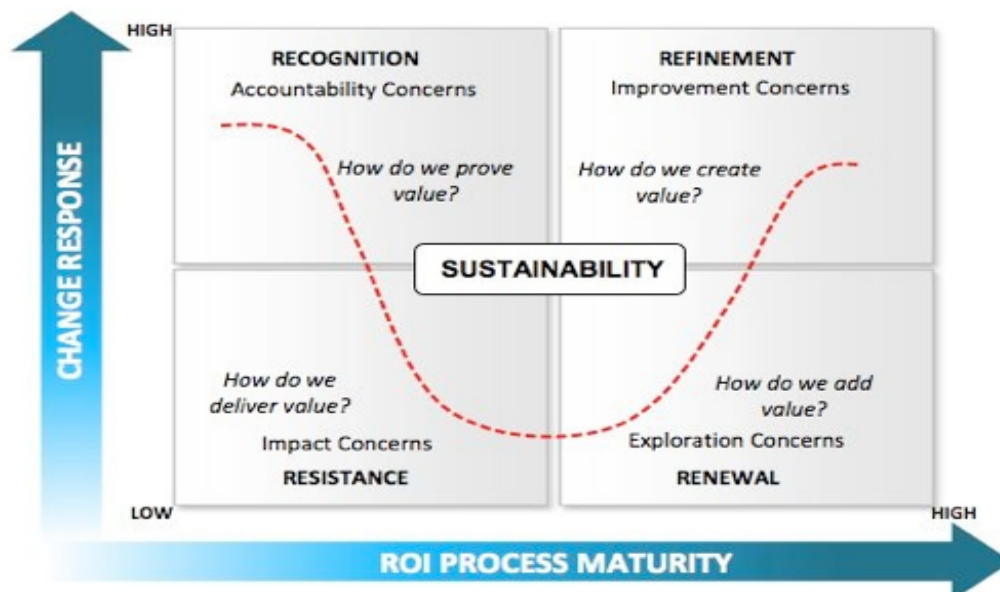


Figure 5.2. Model for Change Response and ROI Process Sustainability. Represents evolutionary stages of organizational change response and ROI process and practice maturity. Adapted from “Stages of ROI Implementation” by J. Phillips, P. Phillips, R. Stone, and H. Burkett, 2006, in *The ROI Fieldbook: Strategies for Implementing ROI in HR and Training*, p. 353. Trademarked 2006 by Evaluation Works. Used with permission.

Integrated findings from this research reinforce that the concerns and stages represented in this model are typical, in varying degrees, of ROI process implementation and that prolonged inertia in one stage, or difficulty moving from one stage to next impedes sustainability of the process. Specifically, participants confirmed that organizational support for maintaining and sustaining ROI process implementation goes through cyclical stages and typically “waxes and wanes” in accordance with evolving business demands, economic threats, new business models, dominant value propositions,

and/or changes in leadership. To illustrate, three qualitative research respondents described situations in which economic downturns, a merger/acquisition, and a shift in leadership (respectively) resulted in the complete dismantling of ROI personnel along with previous evaluation functions, roles, policies, procedures, data base infrastructures, and reporting mechanisms. Each “nosedive” occasion seemed to occur within a 2 year period of initial implementation and integration of the Methodology™. However, in two of the three accounts, both organizations have since re-employed the respondents as evaluation experts, with the intent of resurrecting ROI capabilities to enhance business critical performance needs and address accountability challenges associated with proving HRD value. To that end, qualitative research participants agreed with total quality management and project management research about a) the association between [ROI] process and practice maturity and sustainable [ROI] process implementation and b) the association between [ROI] process and practice maturity and measures of improved business and organizational performance.

What are characteristics of sustainable ROI process implementation?

Frequencies, percentages, and descriptive statistics in phase one of this study, combined with thematic analysis in phase two, were used to identify characteristics of sustainable ROI process implementation. Findings support existing research about characteristics of mature, sustainable results-based measurement and evaluation systems that have been identified in the literature (Kusek & Rist, 2004; Mourier & Smith, 2001). These characteristics include: sponsorship; operating standards; resource allocation; utility; effectiveness; efficiency; clear roles and responsibilities; and accountability. Other indicators of sustainability included familiarity with the ROI process based upon years of

implementation experience and the degree of integration of the methodology based upon perceived valuation of the methodology to the organization (among others).

Descriptive characteristics of organizational size and type are similar to characteristics cited in related research. For example, use of evaluation levels is frequently associated with organizational size. Specifically, organizations with over 20,000 employees have a significantly higher use of Level 4 evaluation than those with 1-500 employees (Phillips, 2003). In this study, the majority of respondents 46 (54.8%) indicate that they are affiliated with organizations between the size of 1 – 500 employees, and of those responding, the majority represent the consultation and education industry with 28 responses (21.4%). Given the demographics of organizational size and type, then, it is not surprising that the majority of quantitative respondents 81 (63.3%) said that, as external practitioners in the “consultation and education” arena, they conduct one to three impact studies annually through use of the ROI Methodology™. This is also consistent with reports from the majority of internal practitioners 46 (41.4%), who report that their organizations conduct one to three impact studies annually with use of the ROI Methodology™. According to one participant, “We are really only gathering L1 and L2 data on a consistent basis.”

Another indicator of sustainability with the ROI process includes the extent to which advocates, implementers, and project managers are familiar with the ROI process, based upon formal training in evaluation and participants’ level of progress in completing certification with the ROI Methodology™. The majority of survey respondents, 62 (48.1%), report one to three years of individual experience using the ROI Methodology™. Internal practitioners report one to three years experience with

organizational use of the ROI Methodology™. The majority of survey respondents, 82 (61.7%), indicate that only one to nineteen percent of HRD staff within their organization, or client organizations (on average), has had any kind of formal training in evaluation and the majority, 78 (60.5%), have not completed ROI Methodology™ certification. Formal training in evaluation and/or ROI certification may be difficult for professionals to secure since only one to nineteen percentage of HRD staff have defined evaluation roles within their organization, or client organizations (on average), 58 (43.6 %). It is therefore not unusual that participants in the quantitative phase, who reported limited formal training in evaluation and/or minimal ROI implementation experience (ie. one to three years), would report difficulty in engaging sponsors and stakeholders to implement and sustain “the whole comprehensive set of processes” associated with ROI implementation. Many respondents indicated that they recognized the need for more formal training or ROI certification, but their employers or organizations would not support it. Qualitative respondents with 7 years or more implementation experience, uniformly emphasized the role of evaluation skill building, competency development, formal training, and continuing education as a predictor and indicator of sustainability as well as a leverage point for increased organizational credibility as a strategic business partner.

Given the participant demographics in the quantitative research phase, it is also not surprising that the following organizational characteristics known to be associated with sustainable measurement and evaluation systems, were reported with limited frequency. Specifically, previous research indicates that a mature, sustainable results-based measurement and evaluation system is characterized by the presence of

documented policies, procedures, and standards governing their use. In this study, 39 (29.5%) report that one to nineteen percent of evaluation activity within their organization, or client organizations (on average), is governed by policies, procedures, or standards. This is consistent with participant reports that they conduct one to three impact studies annually through use of the ROI Methodology™. Phillips' research on training evaluation in the public sector (2003) shows that when an evaluation policy exists, 14.35 % of programs are evaluated at the ROI level as compared to 3.41% of programs that are evaluated at the ROI level when no policy exists. This finding was confirmed by qualitative respondents who all emphasized the importance of operating policies, procedures, and standards when identifying sustainability success factors. It is likely, then, that a greater percentage of policies, procedures, or standards in place at quantitative participants' organizations, would contribute to a greater percentage of evaluation activity and process implementation at the ROI level.

Evaluation research also shows that sustainable ROI process implementation includes policies, procedures, and standards for defining selection criteria to be used when determining which projects to evaluate at higher levels, including at the ROI level (Phillips & Phillips, 2007; Phillips, 2003). Specifically, Phillips and Phillips (2007) report that the "top" criterion used by ROI professionals when selecting programs for ROI evaluation is that the program "is important to strategic objectives" and the second most important criterion is that the program "links to operational goals." While formal policies and procedures governing evaluation work were reported with limited frequency by survey respondents, the majority 94 (74.0%), did agree with existing evaluation research by identifying "important to strategic objectives" as the

most important criteria used when selecting programs to evaluate at the ROI level.

While quantitative respondents reported that a project that is important to strategic objectives may be the most likely candidate for the one to three impact studies conducted annually, the majority 35 (26.1%), report that only one to nineteen percent of HRD results data is publicized in a “scorecard” manner. The next largest percentage, 30 (22.4%), of respondents who reported that no ROI evaluation data is publicized with a scorecard approach is consistent with the percentage(s) of respondents with limited ROI implementation experience, limited formal training in evaluation, limited utilization of the methodology to conduct annual impact studies, and/or those who stated they have yet to integrate the ROI Methodology™ into their organization and/or to integrate evaluation responsibilities into a defined HRD role. Evaluation literature shows, and qualitative study participants with long-term implementation experience concur, that strategic use of a results-based HRD scorecard to track, monitor, and publicize results data is an important characteristic of sustainable ROI process implementation. A micro and macro-level scorecard approach helps executives, HRD leaders, and learning personnel demonstrate the alignment between HRD projects and strategic objectives and provides a mechanism for monitoring the performance of a HRD function.

Research shows (Kusek & Risk, 2004; Phillips & Phillips, 2010; Taub, 2003) that a sustainable measurement and evaluation system is associated with the extent to which results data are reported to senior leaders and decision makers. This is a facet of sustainable implementation that cannot be underestimated. Executives rely upon evidence-based data to determine the value and utility of an HRD function. In a recent

Executive Roundtable session held during the 2010 International Society for Performance Improvement conference in San Francisco, performance improvement professionals asked leaders why learning or performance improvement functions were typically the first to be eliminated during budget constraints. Stephen Cooper, Chairman of Active Life Technologies, replied that the HRD or performance improvement function needed to get better at communicating “clear measures that demonstrate the benefit of training to the organization” in order to foster leadership support and resource allocation.

It is telling that the majority of survey participants, 58 (43.6%), report that only one to nineteen percent of evaluation data reaches senior level decision makers as compared to the majority of qualitative research respondents who described continual reporting of results data (both formal and informal) to senior leadership as a way to enhance evidence based decision making and to maintain executive level support for the ROI process. Interview respondents with 7 or more years implementation experience emphasized that, to maintain a seat at the executive table, it was important to “know the business and show how the Methodology adds business value.” While a small percentage of survey respondents, 8 (6.0%), report that no ROI evaluation data reached decision makers, it is likely that those respondents were those who were still attempting to implement their initial impact study and/or those who report less than one to three impact studies conducted annually.

One key indicator of utility with a comprehensive M & E system is the extent to which it is used for formalized and systemic reflection and organizational learning. Evaluation research shows that use of results data for continuous improvement and institutional knowledge-sharing is an important characteristic of a sustainable

measurement and evaluation system. As stated by one evaluation professional with more than 10 years of sustainable ROI process experience, “I will always share an ROI study with our Project Manager, Instructional Design and Community Practices.”

Survey respondents were asked to describe the extent to which data generated from use of the ROI Methodology™ is applied towards continuous improvement activity.

In contrast to qualitative respondents, the majority 41 (31.3%) reported that the extent to which results data is used for continuous improvement is one to nineteen percent within their organization, or client organizations (on average). Again, this finding is not surprising given that the majority of survey respondents described themselves as early adopters or infrequent users of the methodology, with one to three years implementation experience and one to three years impact studies conducted annually.

Other indicators of utility associated with a sustainable measurement and evaluation system include its capacity to provide usable, relevant information to stakeholders, along with its capacity to add “real world” value through improved quality, effectiveness, and efficiency measures (Bamberger et al., 2006). Descriptive statistics for variables used to analyze the perceived organizational value of the ROI Methodology™ show that the mean for “quality of solution, design, development, or delivery ” is highest at 3.99 (SD = 1.128), closely followed by the means for “alignment of training, HRD solutions to strategic business needs” at 3.91 (SD = 1.110) and “effectiveness of solution, design, development, or delivery at 3.91 (SD = 1.202). The area of perceived organizational value with the lowest mean is “policy decisions about performance practice, resources, or reward structures” at 3.29 (SD = 1.193).

Given that the majority of participants reported one to three studies conducted

annually with the ROI process Methodology™, it is encouraging to see that respondents' consider their evaluation efforts to be positively linked to such sustainability indicators as improved quality, effectiveness, and alignment of HRD solution design, development, and delivery. However, there may be some tendencies for those professionals who design or deliver evaluation services to perceive overall service value in a more favorable light than stakeholders or other organizational leaders who are clients or consumers of evaluation services, products, or programs. Given the small percentage of results data that is reportedly viewed by executive decision makers, it is questionable whether executives in respondents' organizations would perceive the overall value and utility of the Methodology™ in the same manner.

Participants concurred with change process and evaluation literature by citing effective implementation planning, design, delivery, and follow up as key success factors in sustainability of the ROI Methodology™. Quantitative and qualitative research participants describe characteristics of effective *implementation planning* in terms of: an individual/organizational readiness assessment; detailed, realistic, “manageable” implementation plans; appropriate funding and staffing; dedicated, capable, and committed resources; defined roles and responsibilities; partnering with stakeholders around evaluation goals and “expectations”; and operating standards “[to] govern...[evaluation] work”. Characteristics of effective *implementation design* include strategic pilot efforts that are: important to strategic objectives; flexible, scalable; and properly aligned with existing infra-structures, business processes, organizational needs, and critical constraints. Characteristics of effective *implementation delivery or execution* include: dedicated, capable resources; a focus on communicating for impact in terms of

keeping the ROI process Methodology™ simple and relevant to performance results “that stakeholders care about”; continuing education, especially with managers about their role in supporting performance results. Characteristics of effective *implementation follow up* include project-specific coaching, trouble-shooting, resource linking, and sharing of lessons learned for continuous process improvement and professional development.

In summary, quantitative and qualitative findings support and expand upon existing research about characteristics and critical components of a sustainable M & E system. Key characteristics of ROI process sustainability that emerged from this research include: sponsorship or leadership support; stakeholder support; appropriate resource allocation; continuing education and staff development (such as formal training in evaluation) to convert resource assets into resource capabilities. Resource capabilities and competencies encompass the capability to provide: a) technical expertise with change process implementation and evaluation; b) ongoing assessment of individual and organizational readiness or maturity issues that can impact capacity, capability, and performance results; c) appropriate, timely performance support, including supportive and compatible infra-structures, operating policies, and/or procedures; d) realistic performance expectations in the face of cumulative change demands; e) alignment of the ROI evaluation strategy, process and operating standards with existing business processes; f) strategic alliances with primary stakeholders and business partners; g) holistic, full scope implementation planning, design, delivery, and follow up; h) continual publicizing of results data, especially with key executives and decision makers; and i) practical, relevant results data that delivers, adds, and creates organizational value

(Bell & Morse, 2001; Burkett, 2005a; Hailey & Balogun, 2002; Phillips & Ekeles, 2007; Phillips et al., 2006; Phillips & Phillips, 2007b, Wallace, 2001).

What is the relationship between the number of barriers associated with ROI process implementation and sustainability of ROI process implementation?

In phase one of this study, a correlation coefficient was used to determine the relationship between the number of barriers associated with ROI process implementation and sustainability of ROI process implementation, a non-significant negative relationship between the two variables was found. Therefore, no interpretation should be made of the positive or negative relationship since it is statistically equal.

However, participants in both phases of this research study identified multiple and predictable barriers to ROI process implementation, with more than half of respondents, 101 (70.1%), indicating that “conflicting, competing business priorities/demands” frequently pose a barrier and “detract from ROI implementation focus.”

Research shows that threats and barriers are common to most implementation projects, process management initiatives, or HRD interventions, no matter how well-defined or well-executed (Daft, 1992; Greiner, 1972). According to one qualitative research respondent who has successfully embedded the ROI process in her organization for a period of more than 11 years, “[sustaining the ROI process] requires the person who is carrying that banner to stay focused and committed to the change, in spite of all of the obstacles and barriers that they are going to face.”

The concept of persistence is not new to ROI process or project implementation, change process methodology, or project management. Persistence is a critical attribute (a capacity component) for evaluation sponsors, managers, and change agents because

momentum for sustaining the ROI process can only be achieved through persistent efforts to overcome resistance, barriers, or organizational constraints. Persistence in the face of obstacles must begin at the top. Andy Grove, former CEO of Intel Corporation, emphasized the importance of persistence when describing the organizational transition from a struggling startup to a global leader in semiconductors. For example, he described change as an inevitable, rapid convergence of forces and urged leaders to maintain the “highest consciousness” and persistence when such forces converged upon the business landscape (Grove, 2006).

To that end, significant findings indicate that it is not necessarily the type or number of barriers that influences ROI process sustainability as much as the extent to which evaluation project managers anticipate, manage, and convey a commitment to consciously manage barriers or risks. Project management literature emphasizes that risk assessment should occur routinely during project planning and should be re-visited whenever there is a substantive change in project definition, team, approach, or context that may alter the project’s intended course or projected results. Quality improvement research also acknowledges the universality of barriers during stages of process improvement implementation and advocates various tools and methods for addressing them. For instance, the theory of constraints is based upon the premise that in any complex system, at any point in time, there is always a “weak link” or an aspect of that system that limits its ability to achieve its optimum improvement goal. Thus, for an organization to attain significant improvement with a new system or process – such as a measurement system or an evaluation process -- one must identify and address the most limiting aspect or constraints of the system (Moss, 2007).

Evaluation project sponsors and project managers need information about risks and constraints in order to assess whether the value of a HRD project, and its progress to date, warrants continued investment in the face of new business demands and concurrent, conflicting changes in the organizational environment. Risk management is a facet of ROI process implementation that is often underestimated or misjudged by HRD and evaluation project managers as well as project sponsors (Burkett & Hall, 2003; Moynihan, 1997). This is supported by 49 (34 %) of survey respondents who report that the extent to which implementation plans include risk or contingency plans “for attrition of staff, changes in leadership, resource constraints, or unexpected business demands” is “Limited.”

Conclusion One

The more a planned change process is applied to initial, intermediate, and long-term ROI process implementation, the more sustainable the implementation is likely to be. While there are occasions in which the ROI process model can be implemented to support developmental or transitional business needs, the issue of sustaining and integrating a comprehensive measurement and evaluation *process* as a standard, mature business *practice*, represents a systemic, full scope effort. Findings support the concept of sustainable ROI process implementation as a complex change effort that typically occurs within the context of dynamic business environments characterized by volatile change patterns. An explicit change process strategy, as part of an implementation planning process, has been shown to significantly reduce the threats and constraints associated with competing and conflicting change demands, thus increasing the potential for successful and sustainable ROI process implementation.

Conclusion Two

Change capacity is a determinant of a sustainable ROI process implementation in HRD practice. Many researchers emphasize a continual, dedicated focus on growing individual and organizational capacity since the “half-life of knowledge” continues to get shorter and shorter. Swanson and Holton (2009) argue that organizations are being perpetually reshaped by advancing technology, leaner organizational structures, and ever-changing customer demands, all of which require critical capabilities for managing and responding to planned or unplanned change. Given these trends, other researchers describe capability development, capacity building, and process or system maturity in terms of a perpetually renewing “evolution” of growth, where there is no end state (Kusek & Rist, 2004). As stated by one survey respondent, “Building capacity for measurement and evaluation in the learning/training field among colleagues is no easy task... This is a major barrier to successful implementation.”

Conclusion Three

Context matters. Contextual factors refer to internal and external factors, including climate and leadership, that effect how a project is implemented and how successfully it achieves its outcomes and impacts. Herold and Fedor (2008) argue the need for contextual analysis as part of any routine change implementation. They contend organizations often operate in highly competitive political environments and that change leaders must fully consider the cascading sub-changes, potential bottlenecks, and key demands placed upon various downstream leaders and their incumbents, as well as their capacity to meet new demands, when defining the business case for a change effort.

Findings confirm existing research that shows too little emphasis has been placed on assessing the environmental, political, and cultural contexts in which the measurement and evaluation system is meant to function (Bamberger et al., 2006; Hailey & Balogun, 2002; Rouiller & Goldstein, 1993). Proper assessment of the business context is especially critical to sustainable ROI process implementation since research shows poor alignment with the business is the number one reason ROI implementation fails to take hold in an organization (Phillips & Phillips, 2010).

Conclusion Four

Leadership is critical. Whether tasked with implementing a single evaluation project at the ROI level, or integrating the ROI Methodology™ as a sustainable measurement process for tracking measures of organizational effectiveness, high-level support is needed for approval of time, money, expertise, and resources. Approval must come from a committed sponsor who has the authority and desire to provide the appropriate direction, support, resources, and rewards to ensure that evaluation projects and integration efforts will be implemented as planned. Findings confirm the importance of “sponsorship from the top” as a defined pre-requisite to early adoption and support of the ROI process as well as a necessary condition for sustainability of the process. Studies on the implementation success and failure of related business process initiatives, such as Six Sigma, show that to succeed, leaders must a) demonstrate their commitment in the ways in which their business and people are managed, b) stay engaged in the effort, and c) reinforce the importance of [Six Sigma] through regular communications. Findings from this study support existing research showing that leaders’ capability to assess change progress during implementation, and to sustain efforts post-implementation, is a

prevalent area of limitation that impedes change success and exhausts critical resources (Herold & Fedor, 2008). According to Fuller (1997), commitment from a sponsor includes attention and action where and when required during the long haul of a project's implementation.

Conclusion Five

Implementation and sustainability go hand in hand. In keeping with total quality and project management research, the quality and maturity of [ROI] process application is directly related to the quality of the [implementation] process used to develop it. To ensure a sustainable, mature ROI process, then, implementation planning must incorporate change strategies that consider task, people, process, and structural stages of change and how they interact with one another (Adams et al., 1976; Fuller, 1997; Herold & Fedor, 2008; Mayeno, 2007; Tuckman, 1965). Research shows that organizations that simply focus on changing the technical aspects of a new business process without fully assessing a) the maturity levels of existing people, processes, and practices; and b) the environmental impacts, risks, or benefits of measurement strategies upon other structural parts of the organization will risk a decline in productivity, a reduction in employee engagement and organizational commitment, and a decrease in profitability (Herold et al., 2007; Rummler & Brache, 1995; Sobkowiak & LeBleau, 1996). As stated by one qualitative research respondent, "Many times people... may not exactly be familiar with the methodology and they just want the output of the product."

Conclusion Six

A results-based measurement and evaluation system that has no utility will not be sustained. Sustainability and use are interdependent. The standard of utility is consistent

with evaluation standards advocated by the Joint Committee on Standards for Educational Programs (1994), where utility is defined as face validity and the assurance “that stakeholders obtain the information that is needed.” Evaluation project leaders must anticipate multiple uses and users of results based data and should not only report on results achieved, but also present findings about poor outcomes in order to surface problems and present lessons learned for continuous improvement purposes. Evaluation data that is not seen or used will have little perceived value to the organization or to the stakeholders responsible for supporting and funding the function.

Conclusion Seven

Communication with the right people in the right way at the right time is critical to sustainability. In terms of communicating with the right people, one research respondent states,

I have spent a lot of time getting support from our CEO and my Manager and two of the primary stake-holders, so I spent a lot of time in both formal and casual conversations and building those relationships, so that when there is a desire from the organization to drop the project, I have kind of cemented those relationships so that I have greater support when that because it will probably come up, when that discussion comes up, I will be better prepared [and] I will have the support I need.

In terms of communicating in the right way, findings confirm the importance of key communication principles cited in evaluation literature, including: communicating for impact; “constant, continual” communication focusing on success stories and “relevant” outcomes that can be replicated in other areas of the business besides the HRD

function; and keeping language about the ROI Methodology™ simple and practical for stakeholders. Communication strategies need to take into account the information needs of different and diverse stakeholders.

Findings also confirm the importance of timing as a communication and implementation success factor. In a recent Executive Roundtable session held during the 2010 International Society for Performance Improvement conference in San Francisco, Kay Monroe-Townsend, Vice-President of Operations with UPS, urged performance improvement advocates, project leaders, implementation managers, and HRD champions to understand the importance of “time and place.” “Every idea has a point of readiness...plant seeds, have an elevator speech handy...don’t expect immediate results.”

Conclusion Eight

Building evaluation capacity takes time, commitment, constant reinforcement, and dedicated resources. As stated by one survey respondent, “The change culture related to ROI is a slow process. After 13 years of following the ROI methodology, developing standards, being an advocate...we are only now seeing in-depth level 4 analysis.” The need for dedicated resources is a common theme related to sustainable ROI process implementation. Environmental support and incentives, along with compatible infrastructures, are also key factors influencing sustainability. For instance, underestimating the “lead time” needed to create compatible support structures has proven to be a common factor in the failure of business process re-engineering efforts like Six Sigma (Chakravorty, 2010).

Conclusion Nine

Continuing education and development increases sustainability and enhances

individual and organizational capacity. Resource allocation, in and of itself, is not sufficient for a sustainable ROI process. As an asset, a resource is only a strength if it provides capability advantages. Without development, individuals cannot improve evaluation competencies or develop capabilities associated with various change agent roles including: catalyst, process helper, solution giver, and resource linker (Goodwyn, 1996; Phillips et al., 2006, Phillips & Tush, 2008). Developing the capability of available resources is especially critical since many HRD project managers tasked with ROI process implementation do not have defined roles or responsibilities in evaluation and/or lack formal training in evaluation. In addition, many organizations have turned to core teams of subject matter experts to initiate and lead ROI implementation efforts. These individuals or teams are often challenged by a general lack of understanding about the ROI process, pre-existing “baggage” about measurement, unrealistic expectations, and/or fear about how results data will be used – all of which can be partially countered by continuing education and development.

Conclusion Ten

You can't do it alone. Ultimately, the task of sustaining the ROI process over time is not the sole responsibility of the HRD function. Subsequently, partnerships are needed to secure and foster ongoing support, cooperation, interaction, and dedication of individuals and groups across all organizational levels. In times of diminishing or scarce resources, effective partnerships are especially critical for leveraging resources to achieve desired outcomes. Previous research with 210 North American change efforts (Mourier & Smith, 2001), identifies the factor of “support from other executives and departments” as being significantly correlated with change and implementation success. Similarly,

participants in this research study identified the factor of internal support from key stakeholders as a significant influence on maintaining and sustaining ROI process implementation. Stakeholders include every individual department, unit, or partners, who have a major interest in the outcome of the project (Broad, 2008; Fuller, 1997). According to one respondent “I learned...to be sustainable you need support on all levels and you needed funding from upper levels.” Many indicated that poor internal support was a persistent barrier to utilization and integration of the methodology, particularly with Human Resource functions, the training or learning department, and middle managers or stakeholders.

Conclusion Eleven

Value creation is just as important as value delivery. The function of the ROI Methodology™ as an evaluation process and business practice is to make current and future HRD efforts more effective in improving individual and organizational performance and to help consumers and clients of HRD services and products become more proficient in leveraging performance into lasting, meaningful outcomes that build organizational capability and resiliency. Evaluation not only adds value through enhanced accountabilities for performance outcomes but also serves continuous improvement purposes by providing evidence-based feedback about investment decisions to key decision makers.

In the early adoption stages of ROI process implementation, the ROI Methodology™ is often pursued as a means to define, prove, or deliver value. However, as the summative value of results data from a single, or a series of single applications, of the ROI Methodology™ become more embedded, a multiplier effect takes place. In other

words, in keeping with research showing the association between organizational maturity and organizational performance, the greater the operational maturity of the ROI Methodology™, the greater the multiplier effect of increased organizational performance as a value creation outcome. As described by one qualitative research participant, “The ROI process has enabled us to truly implement a business process. Not a HR process, a business process...a flexible applicable with consistent results...that business leaders could relate to...” Another indicated, “We were able to sustain it because we were constantly seeking ways to apply it that were relevant to somebody other than ourselves...and it added value and that is the way it expanded as it did and it sustained itself and grew and evolved.”

Implications

Quantitative and qualitative data analysis was integrated to provide holistic, comprehensive insight about the characteristics of sustainable ROI process implementation as a select measurement and evaluation system. However, since the target population was limited in scope to those individuals from the ROI Institute data base who have had experience and/or training with the ROI Methodology™, findings are not generalizable to all measurement and evaluation systems, all measurement and evaluation types or models, or all evaluation professionals. In addition, findings are also limited by the omission of international practitioners who may experience different issues, challenges, or constraints related to sustainability of the ROI process model. Another limitation relating to sample size and selection is the omission of stakeholders as an interview source. It is possible that stakeholders, or other decision makers in the organization, would have different or conflicting perspectives about the factors

influencing successful ROI process implementation and sustainability. In addition, the trustworthiness of respondents' reports may have been biased by the desire to provide information in ways that reflect more favorably upon them and their evaluation role. Finally, respondents' experience with ROI process implementation may not be representative of all professionals who have attempted to implement and sustain the ROI Methodology™ or any other results-based measurement and evaluation approach. Each of these limitations lend themselves to implications for further research and practice.

Implication One

Research shows that internalizing a comprehensive business process, such as a results-based evaluation system, into a service strategy or function is a complex undertaking that requires fundamental, cultural changes to policies, processes, and programs across all organizational levels (Bamberger et al., 2006; Kusek & Rist, 2004). In a 2009 report for the IBM Center for the Business of Government, Callahan & Kloby state that "Implementing a results-oriented focus represents a fundamental shift in the way the public sector does business – a fundamental shift in the nature of thinking, acting, and managing that moves away from a focus on process and regulation to a focus on outcomes and results."

Project management literature emphasizes the need to incorporate change methodology into comprehensive project initiatives in order to manage ambiguity, create flexible solutions to keep projects on track, enhance the adaptive capability of project teams, and improve implementation success (Van Slyke, 2009). Subsequently, integrating explicit change strategies with ROI implementation planning will increase the durability, maturity, and organizational value of the ROI Methodology™.

Change strategies include: a) making sustainability an essential element of evaluation strategy; b) incorporating customized assessment tools for contextual analysis into evaluation planning and design; c) integrating risk management, feasibility assessments, and/or contingency plans to address threats or constraints related to implementation; d) developing transition plans that address the necessary steps and lead times required for developing both evaluation and change capabilities, building organizational commitment and support, and designing compatible infra-structures to integrate the Methodology™ into existing policies, practices, procedures; and e) incorporating effective project management practices into ROI process implementation delivery and execution.

Integrate a contextual assessment with evaluation planning. In general, integrating a contextual or feasibility assessment into evaluation planning and design implies that a supplemental screening process will be used to assess contextual factors, including change capability and change turbulence, and their potential degree of threat or risk to the organizational resource and capability requirements for ROI process implementation. Context matters. For instance, Epstein's Corporate Sustainability Model (2008) describes the inputs, outputs, processes, and outcomes necessary to implement a successful [corporate] sustainability strategy. It is significant that three of the four stated inputs in this model are described in terms of external context, internal context, and business context. Research shows that while these inputs can often act as constraints, the implementation of strategies, structures, and leadership actions can positively influence their effect.

Much like a gap analysis, then, the purpose of this assessment is to identify potential gaps between actual and desired capabilities for the purpose of prioritizing resource allocation. Incorporating a front-end assessment of contextual factors, such as competing or conflicting change initiatives inside and outside of the HRD function, ensures that leaders and evaluation project managers begin to contemplate comprehensive ROI implementation efforts or impact studies (ie. those targeting Level 3 objectives or above) as more than independent, isolated events. It also assists leaders, who typically fail to assess “upstream/downstream impacts” of change, to take a more strategic view of an organization’s entire change portfolio. All changes cannot be high priority. No matter how carefully the intended performance and business impacts of a major HRD effort have been defined and analyzed in a needs assessment and evaluation planning process, the actual benefits will ultimately be a function of the change environment in which it is embedded (Herold & Fedor, 2008). Volatile change environments and conflicting resource demands have been proven to negate anticipated benefits of many process improvement or HRD efforts. Even in the best of circumstances or most ideal business conditions, performance post-implementation is often below expectations. In this scenario, leaders may often discard the ROI process altogether, conclude “it’s not working” and/or replace it with a new evaluation model when in fact, performance was following a predictable learning curve. This only adds to change turmoil experienced by organizational members since each new “tweak” introduces new change demands and new performance expectations.

Integrate risk management procedures with evaluation planning, design, and delivery. Successful and sustainable implementation requires leaders and evaluation

project managers to identify moderate and high-priority risks that could cause resources to be diverted or spread too thinly. Regardless of how mature the [ROI] process capability or the organization may be, risks can occur at any stage of implementation (Daft, 1992; Greiner, 1972). In fact, findings support existing research showing that such risks as sponsors' losing focus, attrition of key staff, diversion of resources, change turbulence, and competing/conflicting priorities are commonly occurring threats or constraints that sap organizational support and capability, despite a well-planned or well-executed ROI implementation.

There are many risk assessment and risk management tools available for organizational use. Methods for risk assessment and risk management need to be customized and integrated with existing project management approaches. Most approaches include charts or templates for mapping out a risk to determine its position, its probability, and its priority in terms of business or project impact. High-probability/high-impact risks are the most critical and should be managing during ROI process implementation. The low-probability/high-impact risks and high-probability/low-impact risks are next in priority, and may require less focus. (Moynihan, 1997).

Integrate transitional change strategies with strategy design and execution.

Building and integrating a mature ROI process, developing ROI practice capabilities, and creating steady momentum for the ROI Methodology™ over time is a large scale intervention that can appear overwhelming if not split into manageable chunks. Transition planning includes establishing selection criteria and evaluation targets for determining the number and complexity of ROI implementations to conduct on an annual

basis. Many tools, templates, and best practice resources for transition planning are available for professionals' immediate application or customization (Phillips et al., 2006). In addition, staged or transitional approaches during ROI process implementation can improve project results and increase stakeholder support by reducing potential performance threats associated with a chaotic or turbulent change environment. For example, an implementation project or measurement effort targeting objectives at performance (Level 3), business impact (Level 4), and ROI (Level 5) can be enhanced by: early training off-line *prior* to implementation of the HRD initiative being measured and allocation of additional resources, peer coaching, or job-aids to help participants *after* the introduction new skills, knowledge or process improvements (Burkett, 2004; Cloete, 2005; Kusek & Rist, 2004; Phillips et al., 2006; Phillips, 2007a).

Incorporate proven project management approaches into implementation delivery and execution. Effective project management is necessary component for ROI process implementation. Effective project management implies that ROI implementation plans are reasonable, manageable in scope, are appropriately aligned with existing organizational needs, adequately staffed and funded, and include defined milestones for monitoring progress and reviewing planned or unplanned risks to project completion or success.

The plan–do–check–act (PDCA) framework is a predominant four-step approach for managing business process improvement projects and carrying out planned change (Oseko & Tetsuichi, 1990). Just as a circle, or the continuous process of building capacity has no end, the PDCA cycle should be repeated again and again as a iterative feedback loop to ensure continuous process improvement (Shewart, 1939). Figure 5.3

proposes a Plan, Do, Check, Act (PDCA) framework for managing sustainable ROI process implementation.

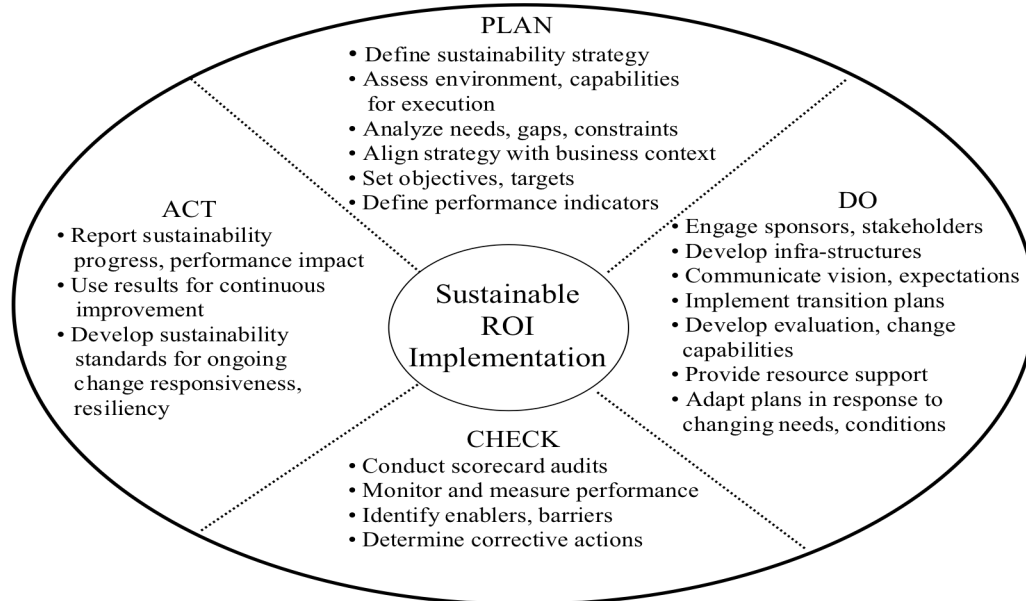


Figure 5.3. Plan, Do, Check, Act Framework for Sustainable ROI Implementation

Implication Two

Committed resources are critical components of ROI process implementation yet resources are not productive in and of themselves. They have to be managed, developed, and coordinated in order to be converted into capabilities. Continuing education, formal and informal training, defined communities of practice, and adequate reward and incentive structures are needed to reinforce competency development and promote the vision and value of building individual and organizational capabilities.

Implication Three

ROI project leaders must not only be capable and confident in the art and science

surrounding the ROI Methodology™, they must also exercise the art and science of influence and persuasion during all phases of implementation planning (including strategy development), design, delivery, and follow up. According to Kusek and Rist (2004), creating, implementing, and sustaining a results-based M & E system is much more of a political challenge related to “keeping champions on your side” to stimulate cultural change than a technical challenge related to evaluation skill development.

Influencing skills are a core competency for establishing strategic business partnerships, establishing support and credibility for the ROI process, engaging resource commitment across all organizational levels, educating stakeholders to counter fear or old school thinking, and serving as a organizational change agent (Robinson & Robinson, 2005).

Implication Four

Use it or lose it. A measurement process that has no utility will not be sustained. The ultimate value of the ROI Methodology™ process as a cornerstone to a comprehensive M & E system resides in its ability to: demonstrate accountability; provide evidence-based data: inform decision making; facilitate continuous individual and organizational learning; engage stakeholders in defining relevant outcome data for tracking individual, team, and organizational performance; and promote understanding about the value of projects, products, services, and programs by “delivering the message” about results achieved (Worthen et al., 2003). Subsequently, evaluation champions must leverage partnership skills to learn about stakeholder needs and ensure that information about results data generated from the ROI Methodology™ is continually disseminated to show how application of the process meets those needs, solves real-world and real-time problems, and adds organizational value.

Implication Five

Translating a vision of sustainability into action requires the development of appropriate policies, principles, systems and measures for assessing progress. “Principles of Assessment” have been shown to be useful starting points for specifying the choice and design of sustainability criteria, suggesting scope, and building capacity. Foremost of these are the Bellagio “Principles of Assessment” (1996), which were developed by an international group of measurement practitioners and researchers to assess performance and progress towards sustainable development by corporations, academics, communities, nations, governments, and international organizations.

From an organizational perspective, there has been increased emphasis and growing sensitivity about sustainability as an overarching business practice, driven largely by the substantial financial payback associated with a proactive sustainability strategy. For example, Dow, a global diversified chemical company, estimates that it will spend close to \$1 billion to achieve \$3-5 billion return over ten years by meeting Resource Productivity Improvement goals which include decreased overall chemical emissions and reduced energy use and waste (Epstein, 2008).

The concept of sustainability in the complex, global business arena is most often associated with the idea of corporate citizenship and corporate responsibility in terms of social (societal), financial, and environmental impacts, or the triple bottom line (Savitz & Weber, 2006). Business communities are gaining more and more evidence that conducting business in socially responsible, economically viable, and environmentally sound ways will create value for customers, increase stakeholder engagement, and significantly improve the bottom line. In fact, Australia-based BHP Billiton, the world’s

largest mining company, describes multiple areas of “value creation” associated with proactive sustainability strategies, including improved stakeholder trust, improved operational performance and efficiency, reduced business risk and enhanced business opportunities, and enhanced ability to strategically plan for the longer term (BHP Billiton, 2004).

In much the same manner, findings shows that a sustainable measurement and evaluation system has the capacity to create value in areas of improved stakeholder trust, improved operational performance and efficiency, reduced business risk and enhanced business opportunities, enhanced ability to strategically plan for the longer term, and improved bottom line returns. Figure 5.4 illustrates the researcher’s adaptation of a “triple bottom line” framework as it applies to sustainable ROI process implementation.

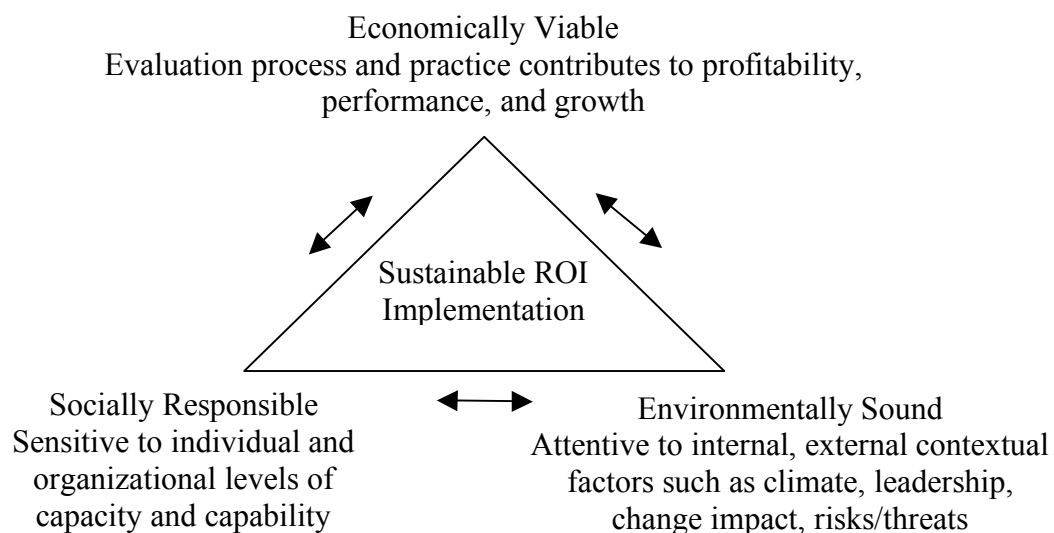


Figure 5.4. Sustainable ROI Implementation and The Triple Bottom Line

In addition, many principles of assessment regarding sustainable development (IISD, 1996) and principles regarding sustainable corporate performance (Epstein & Roy, 2003) have implications for evaluation professionals seeking to develop principles,

policies, and practices to support a sustainable [ROI] measurement and evaluation system. To illustrate, Table 5.2 compares predominant principles of *sustainable* [corporate] *performance* to predominant principles of ROI process sustainability that have emerged from this research, while Table 5.3 compares principles of *sustainable development* described in the literature to principles of sustainable ROI process development that have emerged from this study.

Table 5.2

Comparison of Principles of Sustainability (Corporate Performance)

Nine Principles of Sustainable Performance (Epstein & Roy, 2003)	Principles of Sustainable ROI Process Implementation (Burkett, 2010)
Ethics	Guiding Principles, Operating Standards
Nine Principles of Sustainable Performance	Performance Based Results Data Aligned to Performance Needs
Governance	Sponsorship
Transparency	Accountability
Business Relationships	Partnerships
Financial Return	Micro/Macro ROI of Services, Processes
Community Involvement/Economic Development	Stakeholder Involvement/Communities of Practice/Capability Development
Value of Products and Services	ROI Methodology™ Valuation/Value Creation
Employment Practices	Development Practices

Table 5.3

Comparison of Principles in Practice for Sustainable Development

Bellagio Principles of Sustainable Development (IISD, 1996)	Principles of Sustainable ROI Process Implementation (Burkett, 2010)
Guiding Vision, Goals	Meta-Vision, Micro/Macro Goals
Principles in Practice: Assessing Sustainable Development	Principles of Sustainable ROI Practice: Assessing Context, Capacity Development
Holistic Perspective	Holistic Perspective
Essential Elements (assessment of equity/disparity in resource use, overconsumption, access)	Essential Elements (context, capacity, capability, change process)
Adequate Scope (time & space horizon for immediate, long-term impacts)	Adequate Implementation Planning (contextual analysis, realistic scope, risk management, project management)
Practical Focus	Utility, Relevance, Value Adding, Value Creating
Openness (methods, data accessible)	Openness (methods, data accessible, micro/macro scorecards)
Effective Communication (simple, clear, addresses audience needs)	Communicating for Impact (simple, clear, addresses audience needs, advocates, influences, catalyst/change agent)
Institutional Capacity (continuity of assessing progress towards institutional capacity for data collection, maintenance, documentation)	Practice Maturity and Change Capacity (continuity of assessing progress towards institutional capacity for data collection, maintenance, documentation, maturity of ROI process/practice, change capability, resilience, value creation)

Future Research

Further research is needed to determine whether findings about sustainability of the ROI process as a specific measurement and evaluation system have implications to

other measurement and evaluation types or models, or other evaluation professionals, including those in the international arena. Soliciting stakeholders' perspectives about sustainability issues is another potential area of future research, especially in light of the critical role that stakeholder commitment plays in the utility and durability of a comprehensive measurement and evaluation system (Michalski & Cousins, 2000).

Additional empirical research and/or field studies are needed to validate the concept of maturity levels around evaluation process management (Burkett, 2004) and planned change process management, respectively, as well as to define standard indicators of process and practice maturity in both ROI process implementation, planned change process implementation, and ROI process valuation. For example, Lee, Lee, and Sungwon (2009) recently introduced a business process maturity model called the Value based Process Maturity Model (vPMM) that can be used to determine the maturity of an organization's current business processes and practices based upon business value creation capability.

Harmon (2004), in particular, discusses limitations in many process management maturity models and calls for studies showing the distinction between the maturity of a process and the maturity of an organization. Power (2007) states that there is a significant difference between the maturity of an individual process and the maturity of an organization and claims that a process maturity level cannot be attained or sustained unless a certain organization level maturity is reached.

Further research is also needed to determine the link between indicators of evaluation [ROI] process and practice maturity (sustainability performance) and indicators of organizational performance in such areas as financial performance, learning

and growth, customer perspective, and internal business perspective (Kaplan & Norton, 1996). To that end, further research or pilot testing is needed around an ROI sustainability “scorecard”, an adapted ROI “sustainability index”, or a “sustainability audit” to assist organizations in identifying, tracking, and measuring progress, needs, and/or gaps surrounding [ROI] sustainability performance, especially in terms of value creation outcomes. A major challenge in auditing the sustainability performance of corporate entities and/or the sustainability performance of business process entities like a full scope measurement and evaluation system is the limited standardization of management systems, performance measures, and reporting structures (Epstein, 2008).

In “Empirical Research on Performance Improvement,” Klein (2008) suggests that more empirical research is needed on non-instructional interventions, such as knowledge management, process improvement, rewards and recognition, and strategic planning. Further research on enablers and barriers to a sustainable measurement and evaluation system can help address performance improvement research gaps since a sustainable M & E system has relevance as a knowledge management, process improvement, and a strategic planning tool, respectively.

Finally, qualitative research participants were asked to identify perceived research gaps and future research and development needs in the field of evaluation and ROI. General comments included the following suggestions for future research in select areas of evaluation practice, such as: the whole comprehensive set of talent processes and solutions; a standardized tool that could become a “gold standard” for evaluating ROI data; more comparative analysis; “how to do it [ROI evaluation] faster, better, cheaper”; how to improve time to competency, time to proficiency; the role of biological or

personality factors upon adult learning; more comprehensive level 3 evaluations, practical tools and ‘success stories’; more validation and empirical research around ‘what are the most effective [evaluation] models’ to address questions “that are surfacing more and more”; and how to maintain [ROI process] momentum, especially when [the ROI expert] leaves the organization.

Summary

The objective of this study is to further evaluation theory and practice by identifying and exploring characteristics of sustainable ROI process implementation in HRD practice. The sample population is drawn from public and private sector organizations that have implemented the ROI Methodology™ in the U.S. Research design consists of a sequential, mixed methods study. Four research objectives drawn from previous, scholarly research were tested and addressed by integrating quantitative and qualitative analysis for a more comprehensive and pluralistic view of sustainable ROI implementation. Statistical analysis conducted during phase one of this study showed a highly significant positive relationship between the degree of sustainable ROI process implementation and the degree in which a planned change process is applied to ROI process implementation. Statistical analysis with research objective two supports existing research that describes change capability and capacity as determinants of an organization’s ability to successfully implement a sustainable, results-based evaluation system (Anderson & Anderson, 2001; Bamberger et al., 2006; Herold & Fedor, 2008; Kusek & Rist, 2004). Specifically, results from multiple regression analysis determined that Context, Capacity, Capability, and Planned Change Process factors were significant in predicting sustainability, with the strongest predictor being Capability and the weakest

being Planned Change Process. All predictors had a positive impact on sustainability.

Qualitative and qualitative research findings confirm existing research about characteristics of a sustainable measurement and evaluation system, including committed leadership; dedicated resource allocation; internal support from key stakeholders; contextualized implementation planning; alignment (congruence) with business context, climate, and strategy; and individual and organizational change capability, capacity, and overall readiness. There was consistent agreement among groups about characteristics of sustainability, including implementation success factors and implementation barriers. However, some differences emerged around the degree to which participating organizations have been able to sustain success factors and counter implementation barriers. For example, key success characteristics like sponsorship support, utility of results data, reporting and tracking of results data (especially to senior leadership), resource allocation and development, and maturity of evaluation experience and implementation practice, were less evident among those survey respondents with less implementation experience (ie. one to three years, the majority) and less evaluation training, including ROI certification.

Findings unique to this research show that the business context in which the ROI process is embedded is typically volatile and that organizational change patterns can impede successful implementation if not properly addressed during phases of evaluation planning, design, delivery and follow up. Issues related to sponsors losing focus, having difficulty prioritizing change initiatives, having poor change leadership skills, diverting resources due to conflicting demands, or being insensitive to cumulative change impact were uniformly described as implementation barriers associated with turbulent change

environments. To that end, significant findings indicate that is not necessarily the type or number of barriers that influences ROI process sustainability as much as the extent to which evaluation project managers anticipate, manage, and convey a commitment to consciously manage barriers or risks.

Recognition of the change and risk issues associated with sustainable implementation can guide leaders and practitioners in assessing the ongoing readiness needs, environmental complexities, and resource challenges associated with sustainable development and deployment of the ROI process model. It can also help organizations target interventions and allocate resources to those leverage points that will have the greatest influence on its change adaptability and utility. Implications and guidelines for translating research concepts and conclusions into evaluation practice are provided, along with recommendations for further research.

In summary, the demand for results-based measures of HRD effectiveness, up to and including ROI, has steadily increased with a new generation of decision makers, consumers, participants, taxpayers, stakeholders, and shareholders demanding evidence that monetary resources are put to best use and that investments are allocated to programs, processes, and projects that yield the greatest return and value (Callahan & Kloby, 2009; Phillips & Phillips, 2010; Ulrich & Brockbank, 2005). Ultimately, applying effective change perspectives, processes, and practices to ROI process implementation as a full scope intervention, ensures that decision makers will have a durable, credible measurement system for evidence-based decision making about both HRD investment value and ROI Methodology™ value. While the ROI Methodology™ is often pursued as a means to define, prove, or deliver value, findings show that a multiplier effect takes place

as the ROI Methodology™ becomes more embedded, credible, flexible, and responsive to continuously changing needs and complex environmental conditions. In other words, the greater the operational maturity of the ROI Methodology™, the greater the multiplier effect of value creation as an outcome of sustainable ROI implementation. As described by one research participant, “The ROI process has enabled us to truly implement a business process. Not a HR process, a business process... a flexible approach with consistent results...that [relates to] business leaders...”

APPENDIX A

HUMAN SUBJECTS REVIEW COMMITTEE APPROVAL



THE UNIVERSITY OF SOUTHERN MISSISSIPPI

Institutional Review Board

118 College Drive #5147
 Hattiesburg, MS 39406-0001
 Tel: 601.266.6820
 Fax: 601.266.5509
 www.usm.edu/irb

**HUMAN SUBJECTS PROTECTION REVIEW COMMITTEE
 NOTICE OF COMMITTEE ACTION**

The project has been reviewed by The University of Southern Mississippi Human Subjects Protection Review Committee in accordance with Federal Drug Administration regulations (21 CFR 26, 111), Department of Health and Human Services (45 CFR Part 46), and university guidelines to ensure adherence to the following criteria:

- The risks to subjects are minimized.
- The risks to subjects are reasonable in relation to the anticipated benefits.
- The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered regarding risks to subjects must be reported immediately, but not later than 10 days following the event. This should be reported to the IRB Office via the "Adverse Effect Report Form".
- If approved, the maximum period of approval is limited to twelve months. Projects that exceed this period must submit an application for renewal or continuation.

PROTOCOL NUMBER: **29111603**

PROJECT TITLE: **Change Capacity as a Determinant of Sustainable ROI Implementation in Human Resource Development Practice**

PROPOSED PROJECT DATES: **11/16/0* to 05/31/10**

PROJECT TYPE: **Dissertaion**

PRINCIPAL INVESTIGATORS: **Hollis J. Burkett**

COLLEGE/DIVISION: **Economic and Workforce Development**

DEPARTMENT: **Human Capital Development**

FUNDING AGENCY: **N/A**

HSPRC COMMITTEE ACTION: **Expedited Review Approval**

PERIOD OF APPROVAL: **12/14/09 to 12/13/10**

Lawrence A. Hosman
 Lawrence A. Hosman, Ph.D.
 HSPRC Chair

1-6-10
 Date

APPENDIX B

PRE-NOTICE EMAIL TO POTENTIAL SURVEY RESPONDENTS FROM JACK PHILLIPS



Jack Phillips, PhD Chairman
ROI Institute, Inc.
PO Box 380637
Birmingham, AL 35238-0637
205.678.8101 phone
205.678.8102 fax
www.roiinstitute.net

Dear ROI Professional,

ROI process implementation and “making it stick” is a growing issue as demands for accountability and evidence-based data increase in a business climate characterized by diminishing and competing resources. As evaluation professionals, we have all experienced difficulty - at one time or another – keeping the ROI process on track and maintaining momentum in the face of conflicting priorities and fast-paced moving targets.

To help us understand more about this important issue, one of our colleagues, Holly Burkett, will soon be sending you an email invitation to participate in her doctoral dissertation project around sustainability of the ROI Methodology™. Holly is looking for participants who have had experience ROI process implementation and is asking for volunteers to take part in a confidential on-line survey. The survey will take approximately 20 minutes to complete and can be found on the following link:

As an incentive to participate, the ROI Institute is pleased to offer the first 200 respondents a copy of our recent book *Beyond Learning Objectives* (2008), published by ASTD Press. As a participant, you will also receive a summary of survey results.

While participation is strictly voluntary, you are in a unique position to inform this research and offer invaluable insights that would contribute to the growing literature on training evaluation.

Your support of this dissertation research is deeply appreciated. It is only through your generous time and support that this research can be successful. If you have any questions regarding this project, please call Holly directly at (530) 400-8875 or email her at hollyburkett@roiinstitute.net.

Sincerely,

A handwritten signature in black ink, appearing to read "Jack Phillips", written over a horizontal line.

Jack Phillips, PhD
Chairman
ROI Institute, Inc.

APPENDIX C

QUANTITATIVE SURVEY

Sustainable ROI: Dissertation Survey

DISSERTATION SURVEY: INTRODUCTION

THANK YOU for agreeing to participate in this dissertation survey and research project!

PURPOSE: This survey gathers data about characteristics of sustainable ROI implementation in **Workplace Learning, Human Resource Development (HRD), Performance Improvement, and Meetings and Events** practice, respectively.

Sustainability, here, refers to the process of integrating the ROI Methodology[®] as a standard business practice and "making it stick" in climates characterized by moving targets, conflicting priorities, and increased competition for resources.

Results will be used to further evaluation theory and practice.

CONTENT: SUCCESS FACTORS associated with sustainable ROI implementation are addressed in Section A; BARRIERS associated with sustainable ROI implementation are addressed in Section B; CHANGE RESPONSE patterns are assessed as a factor influencing sustainability in Section C; the MATURITY LEVEL of ROI implementation practice by both you and your client organizations is addressed in Section D; DEMOGRAPHIC information is captured in Section E; and Section F collects optional follow data.

PROCESS: You should be able to provide thorough responses in **20 minutes**. Responses should be based upon your observations and experiences with implementing the ROI Methodology as either an internal or external consultant.

If you are an external consultant, responses should be based on your **collective** experience and observations in one or more organizations.

PARTICIPATION: Participation is completely **Voluntary** and you may discontinue at any time without penalty or prejudice. To maintain **Confidentiality**, your name will not be linked to your input. After responses are coded and a mailing list compiled for results distribution, individual responses will be destroyed and only summary information will be retained.

WHAT'S IN IT FOR YOU: In exchange for your participation in this research, the **first 200 respondents** will receive their choice of *Measuring for Success: What CEOs Really Think About Learning Investments* (2010) or *Beyond Learning Objectives* (2008) by Drs. Jack and Palli Phillips of the ROI Institute. All respondents will receive a Summary Report highlighting survey results.

NOTE: This project has been approved by the Human Subjects Review Committee, which ensures that research projects involving human subjects follow federal regulations. Any concerns or questions about your rights as a research subject can be directed to the Chair of the Institutional Review Board, The University of Southern Mississippi, Box 5147, Hattiesburg, MS. 39406, (601) 266-6820.

Please contact Holly Burkett by phone at 530-400-8875 or by email at [Email Me](#) with any questions or concerns about this survey. Responses are requested by February 15, 2010.

SECTION A: Implementation Success Factors

Below are common **SUCCESS** factors associated with effective and sustainable ROI process implementation. Factors are grouped into four categories: CONTEXT, CAPABILITY, CAPACITY, and CHANGE PROCESS.

Given the definition below, consider your organization's **pattern** of implementing the ROI Methodology[®], beyond the life-cycle of one impact study.

[illegible]

Sustainable ROI: Dissertation Survey

4. CHANGE PROCESS

Please rate the extent to which each factor **TYPICALLY** occurs during ROI process implementation, in your organization or your client organizations (on average).

	No Extent	Some Extent	Moderate Extent	Significant Extent	Very Significant Extent	No Opportunity to Observe
Implementation occurs in a business environment characterized by multiple, overlapping, urgent changes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Implementation plans address organizational change issues associated with adopting and/or sustaining the ROI Methodology	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Implementation leaders demonstrate effective change leadership behaviors (ie. forthrightly addresses concerns, obtains buy-in, engages in joint problem-solving)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Committed resources are available throughout implementation, even with competing demands	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Implementation includes risk management or contingency planning (ie. for attrition of staff, changes in leadership, resource constraints, unexpected business demands)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Organizational support for ROI implementation is cyclical and contingent upon evolving business demands, economic threats, new business models, and/or changes in leadership	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

SECTION B: Implementation Barriers

Below are common **BARRIERS** associated with successful and sustainable ROI process implementation. Barriers are grouped into four categories: CONTEXT, CAPABILITY, CAPACITY, and CHANGE PROCESS.

Given the definition below, consider your organization's **pattern** of implementing the ROI Methodology™, beyond the life-cycle of one impact study.

If you are an external consultant, consider patterns that you have observed or experienced in your client organizations, **on average**.

ROI Process Implementation: Refers to executing or putting into effect the steps, operating standards, and guiding principles of the ROI Methodology™ for the purpose of evaluating a single program, project, or initiative, as well as a series of programs, projects, or initiatives over time.

Sustainable ROI: Dissertation Survey

8. CHANGE PROCESS

Please indicate which of the following represent the **MOST FREQUENTLY** occurring barriers to ROI process implementation, in your organization or your client organizations (on average). **CHECK ALL THAT APPLY.**

- ☐ Competing, conflicting business priorities/demands detract from ROI implementation focus
- ☐ Limited perspective about change issues associated with ROI implementation (ie. employees' fear of how results data will be used, anxiety about increased accountability)
- ☐ Limited to no change leadership strategies applied to implementation effort
- ☐ Committed resources diverted during implementation due to competing demands
- ☐ Limited to no risk management or contingency planning (ie. for attrition of staff, changes in leadership, resource constraints, unexpected business demands)
- ☐ Episodic, sporadic, "waxing/waning" organizational support for ROI implementation
- ☐ NA - Have not observed or experienced any of these barriers
- ☐ No Opportunity to Observe

If NA, please comment

SECTION C: Organizational Change Patterns

Below are common **CHANGE ISSUES** associated with a comprehensive and complex organizational change effort, with organizational change defined below.

If you are an external consultant, consider patterns of change response that you have observed or experienced in your client organizations, **on average**.

Organizational Change: Something initiated by one or more organizational leaders intended to achieve certain results through new demands placed on individuals, groups, or departments. Change success depends upon the support of those affected and is characterized by significant departures from existing routines and job behaviors.

Sustainable ROI: Dissertation Survey

9. ORGANIZATIONAL CHANGE PATTERNS

Please rate the extent with which each factor **TYPICALLY** occurs during a complex change effort of **ANY** kind (up to and including ROI implementation), in your organization or your client organizations (on average).

	No Extent	Limited Extent	Moderate Extent	Significant Extent	Very Significant Extent	No Opportunity to Observe
Complex change projects require approval at multiple leadership or management levels	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The business case for complex change projects is communicated effectively throughout the organization	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Project leaders balance the time spent planning with time spent implementing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Leaders are sensitive to the effect of cumulative, overlapping changes upon employees' energy, motivation, or adaptability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Performance expectations, after the introduction of a change effort, are realistic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Leaders effectively prioritize overlapping change projects in order to eliminate less essential ones and improve change success	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Management-created project teams fully understand and support changes they are asked to implement	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Past change initiatives have successfully met strategic goals and achieved desired results	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Failed change efforts are typically attributed to employee resistance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Internal controls are in place to ensure that resources (people, money, materials, tools, technologies) are properly utilized during a major change effort	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Leaders stay on track throughout every phase of a complex change effort	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Leaders assess the overall impact (ie. upstream, downstream) to the organization before going forward with a complex change	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comments

[illegible]

[illegible][illegible][illegible][illegible][illegible]

Sustainable ROI: Dissertation Survey

18. Approximately what percentage of the total training, HRD, performance improvement, or meetings/events budget is applied towards evaluation, in your organization or your client organizations (on average)?

	None	1-19%	20-39%	40-59%	60-79%	80-100%	No Opportunity to Observe
Select one.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

19. PERCEIVED VALUE

Please rate the extent to which data generated from the ROI Methodology™ adds OVERALL VALUE to each of the following components, of your organization or your client organizations (on average):

	No Extent	Limited Extent	Moderate Extent	Significant Extent	Very Significant Extent	No Opportunity to Observe
Credibility of the training, HRD, performance improvement, or meetings/events function	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Alignment of training, HRD, performance improvement, or meetings/events solutions to strategic business needs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Efficiency of solution design, development, and/or delivery	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Effectiveness of solution design, development, and/or delivery	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Quality of solution design, development, and/or delivery	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Increased support from key stakeholders or decision makers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Policy decisions about performance practices, resources, and/or reward structures	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Processes used to track employee, or employee group, performance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Processes used to track organizational performance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Institutional knowledge-sharing based on lessons learned from results data	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Enhanced culture of accountability in the workplace	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Other (please specify)

Sustainable ROI: Dissertation Survey

21. Type of Organization You Represent

- ☐ Government
☐ Finance
☐ Health Care
☐ Biomedical
☐ Aviation, Space, & Defense
☐ Automotive
☐ Education
☐ Chemical & Process Industries
☐ Energy & Environmental
☐ Electronics & Communication
☐ Consultation and Education
☐ Meetings and Events
☐ Other (please specify)

22. Size of Your Organization (including fulltime, part-time, and contract employees).

Select the proper heading and choose from the appropriate drop-down menu.

	1 - 10,000	10,001 - 50,000	50,001 - 85,000	85,001 - 100,000 Plus
Select one.	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

23. Approximate number of employees, in your organization, working in the United States.

24. Approximate total training budget (ANNUAL), in your organization.

Sustainable ROI: Dissertation Survey**25. Which of the following best describes your title?**

- ☐ Executive
- ☐ Director
- ☐ Officer
- ☐ Administrator
- ☐ Manager
- ☐ Supervisor
- ☐ Consultant (internal)
- ☐ Consultant (external)
- ☐ Trainer
- ☐ Specialist
- ☐ Designer
- ☐ Analyst
- ☐ Evaluator
- ☐ Other (please specify)

26. Number of years you have been working in the training, HRD, performance improvement or meetings/events profession.

- ☐ 1 - 3 years
- ☐ 4 - 6 years
- ☐ 7 - 10 years
- ☐ 11 years or more
- ☐ NA

27. Your highest level of academic achievement.

- ☐ Associate Degree
- ☐ Bachelors Degree
- ☐ Masters Degree
- ☐ Doctoral Degree
- ☐ Major of highest level (please specify)

Sustainable ROI: Dissertation Survey

28. Have you earned ROI Methodology™ certification (ie. completed required project)?:

☐ Yes

☐ No

Other relevant certifications, education (please specify)

29. Your gender.

☐ Male

☐ Female

30. General comments regarding this survey, this research, or the topic of sustaining a comprehensive measurement and evaluation system:

THANK YOU for your time and valuable feedback!

31. If you are interested in receiving your choice of books by Drs. Jack and Patti Phillips' of the ROI Institute, please select one of the following:

☐ *Measuring for Success: What CEO's Really Think About Learning Investments* (2010)

☐ *Beyond Learning Objectives* (2008)

32. To receive your complimentary book, please provide the following:

REMINDER: All survey responses will remain confidential and your name will not be linked to survey results.

Name:
 Address:
 City/Town:
 State:
 ZIP:
 Email Address:
 Phone Number:

APPENDIX D

FOLLOW UP EMAIL TO POTENTIAL SURVEY RESPONDENTS

TO INFORM THEM ABOUT THE STUDY

Hello. My name is Holly Burkett and I am writing to follow up on a message you recently received from Dr. Jack Phillips of the ROI Institute.

You were referred to me by the ROI Institute as an individual who might be willing to participate in my dissertation research focusing on characteristics of sustainable ROI implementation. As part of this study, approved by The University of Southern Mississippi, I will be surveying a number of professionals across a range of industries that have had 1 or more years of implementation history with the ROI Methodology. The purpose is to learn about the conditions necessary to successfully sustain the ROI Methodology over time, based upon practitioners' observations and experience.

My hope is that the results of this research will help individuals and organizations understand more about the factors that enable and deter sustainability of a results-based measurement and evaluation system like the ROI Methodology. This can then help inform strategic decisions about where to target interventions that will have the greatest influence on the adaptability, effectiveness, utilization, and long term durability of the ROI Methodology as a performance improvement resource.

Participation is voluntary and relatively straight-forward; it will consist of a 20 minute on-line survey with 5 short sections, focusing upon: a) *success factors* associated with sustainable ROI implementation; b) *barriers* associated with sustainable ROI implementation; c) *patterns of change response* within the environment where the ROI Methodology functions; d) the *maturity level* of your ROI implementation; and e) *demographic* information.

Your participation will be kept anonymous; the information you share will be confidential and, if presented, will be used without attribution or mention of your name or organizational affiliation. The link to the survey is: <http://www.surveymonkey.com/s/VY32J96>.

This project has been approved by the Human Subjects Review Committee, which ensures that research projects involving human subjects follow federal regulations. Any concerns or questions about your rights as a research subject can be directed to the Chair of the Institutional Review Board, The University of Southern Mississippi, Box 5147, Hattiesburg, MS. 39406, (601) 266-6820.

Thank you for your assistance with this dissertation research. It is only through your generous time and support that this research can be successful.

If you have any questions regarding this project, please feel free to call me at (530) 400-8875 or email me at hollyburkett@roiinstitute.net.

Sincerely,
Holly Burkett, SPHR, CPT
Certified ROI Professional
Doctoral Candidate, The University of Southern Mississippi

Research Supervised By:
Dr. Patti Phillips
Adjunct Professor, Department of Economic and Workforce Development
The University of Southern Mississippi
730 E. Beach Blvd.
Long Beach MS 39560
205 678-8101 phone 205 678-8102 fax

APPENDIX E

FOLLOW UP EMAIL TO POTENTIAL SURVEY RESPONDENTS

A few days ago you received an email request to participate in a research study focusing on the characteristics of sustainable ROI implementation.

Participation is strictly voluntary and relatively straight-forward; it will consist of a 20 minute on-line survey with 5 short sections, focusing upon: a) ***success factors*** associated with sustainable ROI implementation; b) ***barriers*** associated with sustainable ROI implementation; c) ***patterns of change response*** within the environment where the ROI Methodology functions; d) the ***maturity level*** of your ROI implementation; and e) ***demographic*** information. Your participation will be kept anonymous; the information you share will be confidential and, if presented, will be used without attribution or mention of your name or organizational affiliation. The link to the survey is: <http://www.surveymonkey.com/s/VY32J96>.

If you have already completed the questionnaire, thank you for your assistance with this dissertation research. It is only through your generous time and support that this research can be successful.

If you have elected not to participate, please note that this is the last announcement you will receive about it. Feel free to contact me by phone at (530) 400-8875 or by email at hollyburkett@roiinstitute.net with any questions regarding this project.

Sincerely,

Holly Burkett, SPHR, CPT
Certified ROI Professional
Doctoral Candidate, The University of Southern Mississippi

Research Supervised By:
Dr. Patti Phillips
Adjunct Professor
Department of Economic and Workforce Development
The University of Southern Mississippi
730 E. Beach Blvd.
Long Beach MS 39560
205 678-8101 phone
205 678-8102 fax

APPENDIX F

PRE-NOTICE EMAIL TO POTENTIAL INTERVIEW PARTICIPANTS

FROM JACK PHILLIPS



Jack Phillips, PhD
Chairman
ROI Institute, Inc.
PO Box 380637
Birmingham, AL 35238-0637
205.678.8101 phone
205.678.8102 fax
www.roiinstitute.net

Dear ROI Professional,

Implementing the ROI process and “making it stick” is a growing issue as demands for accountability and evidence-based data increase in a business climate characterized by diminishing and competing resources. As evaluation professionals, we have all experienced difficulty - at one time or another – keeping the ROI process on track and maintaining momentum in the face of conflicting priorities and fast-paced moving targets.

To help us understand more about this important issue, one of our colleagues, Holly Burkett, will soon be sending you an email invitation to participate in her doctoral dissertation project around sustainability of the ROI Methodology. Holly is looking for participants who have had 3 or more years experience implementing the ROI Methodology and is asking for volunteers to take part in a Confidential telephone interview. The interview will take approximately 45 – 60 minutes to complete and participants will receive a copy of the interview questions in advance.

As an incentive to participate, the ROI Institute is pleased to offer volunteers a copy of our recent book *Beyond Learning Objectives* (2008), published by ASTD Press. As a participant, you will also receive a summary of survey results.

While participation is strictly voluntary, you are in a unique position to inform this research and offer invaluable insights that would contribute to the growing literature on training evaluation.

Your support of this dissertation research is deeply appreciated. It is only through your generous time and support that this research can be successful. If you have any questions regarding this project, please call Holly directly at (530) 400-8875 or email her at hollyburkett@roiinstitute.net.

Sincerely,

A handwritten signature in black ink, appearing to read "Jack Phillips", written over a horizontal line.

Jack Phillips, PhD
Chairman
ROI Institute, Inc.

APPENDIX G

FOLLOW UP EMAIL TO POTENTIAL INTERVIEW PARTICIPANTS

Hello. My name is Holly Burkett and I am writing to follow up on a message you recently received from Dr. Jack Phillips of the ROI Institute.

You were referred to me by the ROI Institute as an individual who might be willing to participate in my dissertation research focusing on the characteristics of sustainable ROI implementation. As part of my dissertation research at The University of Southern Mississippi, I will be interviewing a select number of professionals, across a range of industries, who represent organizations with 3 or more years experience applying the ROI Methodology. The purpose of the telephone interview is to learn more about the conditions necessary to successfully sustain the ROI Methodology over time, based upon professionals' experiences and observations.

My hope is that the results of this research will help individuals and organizations learn more about the factors that enable and deter sustainability of a results-based measurement and evaluation system like the ROI Methodology. This can then help inform strategic decisions about where to target interventions that will have the greatest influence on the adaptability, effectiveness, utilization, and long term durability of the ROI Methodology as a performance improvement resource.

Participation is voluntary and relatively straight-forward; it will consist of a 45 – 60 minute in-depth telephone interview focusing on your ROI implementation experience with questions provided in advance. The information you share will be confidential and, if presented, will be used without attribution or mention of your name or organizational affiliation.

I will be contacting you within the next week to explore your willingness to participate and to discuss potential interview dates and times. I am proposing two options for interview dates and hope that we can agree on a day and time that suits your schedule.

Option 1: Interview Date

Option 2: Interview Date

Thank you very much for your assistance with this dissertation research. It is only through your generous time and support that this research can be successful. If you have any questions regarding this project, please feel free to call me at (530) 400-8875 or email me at hollyburkett@roiinstitute.net.

Finally, please note that this project has been approved by the Human Subjects Review Committee, which ensures that research projects involving human subjects follow federal regulations. Any concerns or questions about your rights as a research subject can be directed to the Chair of the Institutional Review Board, The University of Southern Mississippi, Box 5147, Hattiesburg, MS. 39406, (601) 266-6820.

Sincerely,

Holly Burkett, SPHR, CPT, Certified ROI Professional
Doctoral Candidate, The University of Southern Mississippi

Research Supervised By:
Dr. Patti Phillips
Adjunct Professor
Department of Economic and Workforce Development
The University of Southern Mississippi
730 E. Beach Blvd.
Long Beach MS 39560
205 678-8101 phone
205 678-8102 fax

APPENDIX H

CONSENT FORM

Consent (Short Form)

THE UNIVERSITY OF SOUTHERN MISSISSIPPI AUTHORIZATION TO PARTICIPATE IN RESEARCH PROJECT

Participant's Name: P3

Consent is hereby given to participate in the research project entitled:
Change Capacity as a Determinant of Sustainable ROI Implementation in HRD Practice.

Name of Dissertation Researcher:

All procedures and/or investigations to be followed and their purpose, including any experimental procedures, were explained by Holly Burkett, Doctoral Student, The University of Southern Mississippi.

Information was given about all benefits, risks, inconveniences, or discomforts that might be expected. The opportunity to ask questions regarding the research and procedures was given. Participation in the project is completely voluntary, and participants may withdraw at any time without penalty, prejudice, or loss of benefits.

All personal information is strictly *confidential*, and no names will be disclosed. Any new information that develops during the project will be provided if that information may affect the willingness to continue participation in the project.

Questions concerning the research, at any time during or after the project, should be directed to Holly Burkett at 530-400-8875. This project and this consent form have been reviewed by the Human Subjects Protection Review Committee, which ensures that research projects involving human subjects follow federal regulations. Any questions or concerns about rights as a research participant should be directed to the Chair of the Institutional Review Board, The University of Southern Mississippi, 118 College Drive #5147, Hattiesburg, MS 39406-0001, (601) 266-6820.

Your Telephone Interview has been scheduled for: Monday, March 15th at 12:30pm
PST/3:30pmEST

Please advise Holly Burkett at hollyburkett@roiinstitute.net if there have been any changes to your availability.

Signature of participant

Date

Holly Burkett

Signature of person explaining the study
(Holly Burkett)

3/12/10

Date

APPENDIX I

CONFIDENTIALITY AGREEMENT

Title of Dissertation Project: Change Capacity as a Determinant of Sustainable ROI Implementation in HRD Practice

Name of Dissertation Researcher: Hollis J. Burkett, Doctoral Student, The University of Southern Mississippi

I have agreed to assist Holly Burkett in her dissertation research study on the characteristics of sustainable implementation of the ROI Methodology. I understand that all participants in this project have been assured that their responses will be kept confidential.

I agree to maintain that confidentiality. I also agree that I will not retain materials from this research beyond the scope of the dissertation study and I further agree that I will not make independent use of any research material or information obtained during the course of this project.

Signature: _____

Date: _____

Printed Name: _____

Title: _____

APPENDIX J

QUANTITATIVE SURVEY RESPONSES

Sustainable ROI: Dissertation Survey

1. CONTEXT Please rate the extent with which each factor TYPICALLY occurs during ROI process implementation, in your organization or your client organizations (on average).							
	No Extent	Limited Extent	Moderate Extent	Significant Extent	Very Significant Extent	No Opportunity to Observe	Rating Average
ROI implementation is linked to clear business need(s)	4.1% (6)	19.2% (28)	21.2% (31)	24.0% (35)	27.4% (40)	4.1% (6)	3.54
ROI process is aligned with existing policies, procedures, structures, processes	9.6% (14)	21.2% (31)	25.3% (37)	24.0% (35)	15.1% (22)	4.8% (7)	3.14
Sponsorship is visible during project start-up	4.8% (7)	20.5% (30)	22.6% (33)	27.4% (40)	19.2% (28)	5.5% (8)	3.38
Credible ROI leader/project manager is assigned	6.9% (10)	15.9% (23)	25.5% (37)	25.5% (37)	20.7% (30)	5.5% (8)	3.39
Communication plan delivered to appropriate stakeholders	6.2% (9)	15.9% (23)	24.8% (36)	29.0% (42)	20.0% (29)	4.1% (6)	3.42
Accountabilities are in place for milestone achievements	7.5% (11)	19.9% (29)	24.0% (35)	26.0% (38)	17.8% (26)	4.8% (7)	3.28
Equitable rewards/incentives are provided	21.9% (32)	36.3% (53)	18.5% (27)	11.0% (16)	3.4% (5)	8.9% (13)	2.32
Indicators of implementation progress are defined	9.0% (13)	14.6% (21)	27.1% (39)	29.9% (43)	15.3% (22)	4.2% (6)	3.29
Indicators of implementation progress are tracked	8.2% (12)	15.1% (22)	26.7% (39)	28.1% (41)	17.8% (26)	4.1% (6)	3.34
Implementation results are publicized (ie. with a learning scorecard)	9.6% (14)	25.3% (37)	21.2% (31)	25.3% (37)	11.6% (17)	6.8% (10)	3.04
Implementation results (positive, negative) are used for continuous improvement	6.8% (10)	27.4% (40)	20.5% (30)	23.3% (34)	17.1% (25)	4.8% (7)	3.17
	answered question						
	skipped question						

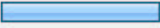

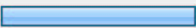

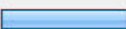
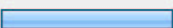
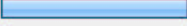
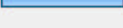
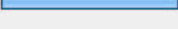
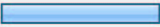



2. CAPABILITY Please rate the extent to which each factor TYPICALLY occurs during ROI process implementation, in your organization or your client organizations (on average).							
	No Extent	Limited Extent	Moderate Extent	Significant Extent	Very Significant Extent	No Opportunity to Observe	Rating Average
Detailed implementation/project plan is developed	5.4% (8)	14.3% (21)	29.9% (44)	30.6% (45)	15.6% (23)	4.1% (6)	3.38
Roles/responsibilities are clearly defined (people know what they have to do to implement the plan)	6.8% (10)	11.6% (17)	26.5% (39)	33.3% (49)	17.7% (26)	4.1% (6)	3.45
Implementation scope is realistic, manageable	5.4% (8)	13.6% (20)	27.2% (40)	36.1% (53)	12.9% (19)	4.8% (7)	3.35
Sponsorship remains steady, committed throughout implementation	7.5% (11)	26.0% (38)	24.7% (36)	26.7% (39)	10.3% (15)	4.8% (7)	3.06
Internal support is available from key executives, groups, or critical stakeholders	8.8% (13)	22.4% (33)	29.9% (44)	27.2% (40)	7.5% (11)	4.1% (6)	3.02
ROI project team is provided sufficient resources (people, money, materials, tools, technologies)	11.6% (17)	25.3% (37)	32.2% (47)	18.5% (27)	7.5% (11)	4.8% (7)	2.86
Resources (people, money, materials, tools, technologies) are effectively utilized during implementation	8.2% (12)	21.8% (32)	29.9% (44)	28.6% (42)	7.5% (11)	4.1% (6)	3.06
	answered question						
	skipped question						


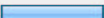

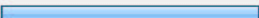

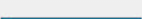
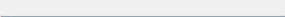
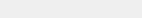


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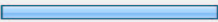
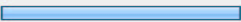
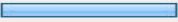



3. CAPACITY: Please rate the extent to which each factor TYPICALLY occurs during ROI process implementation, in your organization or your client organizations (on average).							
	No Extent	Some Extent	Moderate Extent	Significant Extent	Very Significant Extent	No Opportunity to Observe	Rating Average
Employees' readiness, energy, and/or motivation to support implementation demands are properly assessed	9.6% (14)	33.6% (49)	33.6% (49)	15.1% (22)	3.4% (5)	4.8% (7)	2.68
Organizational readiness to meet new demands are properly assessed	12.4% (18)	31.0% (45)	33.1% (48)	15.9% (23)	2.8% (4)	4.8% (7)	2.64
Performance support mechanisms (early training, job aids, coaching, on-the-job training) are in place for ROI implementation	9.7% (14)	31.9% (46)	21.5% (31)	24.3% (35)	6.3% (9)	6.3% (9)	2.84
Allowances are made for potential performance declines due to employees' learning curves	23.4% (34)	27.6% (40)	27.6% (40)	10.3% (15)	2.8% (4)	8.3% (12)	2.36
	answered question						
	skipped question						

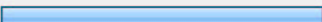

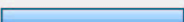
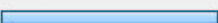

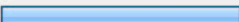


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4. CHANGE PROCESS Please rate the extent to which each factor TYPICALLY occurs during ROI process implementation organization or your client organizations (on average).							
	No Extent	Some Extent	Moderate Extent	Significant Extent	Very Significant Extent	No Opportunity to Observe	Rating Average
Implementation occurs in a business environment characterized by multiple, overlapping, urgent changes	4.8% (7)	16.3% (24)	14.3% (21)	29.9% (44)	28.6% (42)	6.1% (9)	3.65
Implementation plans address organizational change issues associated with adopting and/or sustaining the ROI Methodology	15.8% (23)	30.8% (45)	24.7% (36)	17.8% (26)	4.1% (6)	6.8% (10)	2.61
Implementation leaders demonstrate effective change leadership behaviors (ie. forthrightly addresses concerns, obtains buy-in, engages in joint problem-solving)	10.3% (15)	28.1% (41)	26.0% (38)	24.0% (35)	6.2% (9)	5.5% (8)	2.87
Committed resources are available throughout implementation, even with competing demands	8.2% (12)	33.6% (49)	32.9% (48)	16.4% (24)	4.1% (6)	4.8% (7)	2.73
Implementation includes risk management or contingency planning (ie. for attrition of staff, changes in leadership, resource constraints, unexpected business demands)	21.5% (31)	34.0% (49)	25.7% (37)	9.0% (13)	4.2% (6)	5.6% (8)	2.37
Organizational support for ROI implementation is cyclical and contingent upon evolving business demands, economic threats, new business models, and/or changes in leadership	11.0% (16)	17.1% (25)	28.8% (42)	28.1% (41)	7.5% (11)	7.5% (11)	3.04
	answered question						
	skipped question						

5. CONTEXT Please indicate which of the following represent the MOST FREQUENTLY occurring barriers to ROI process implementation, in your organization or your client organizations (on average). CHECK ALL THAT APPLY.			
		Response Percent	Response Count
Poor linkage to a clear business need(s)		34.3%	49
Poor alignment with existing policies, procedures, processes		35.7%	51
Ineffective sponsorship during project start-up		42.0%	60
Poor credibility of ROI leader/project manager		15.4%	22
Poor communication planning with stakeholders		27.3%	39
Limited accountabilities for milestone achievements		37.1%	53
Inequitable rewards/incentives		40.6%	58
Insufficient indicators in place to assess implementation progress		26.6%	38
Ineffective tracking of key indicators		38.5%	55
Limited to no use of implementation results (positive, negative) for continuous improvement		34.3%	49
Mis-use of results data (ie. individuals inappropriately penalized for poor progress)		17.5%	25
NA - Have not observed or experienced any of these barriers		6.3%	9
No Opportunity to Observe		4.2%	6
If NA, please comment			13
answered question			143
skipped question			6

6. CAPABILITY Please indicate which of the following represent the MOST FREQUENTLY occurring barriers to ROI process implementation, in your organization or your client organizations (on average). CHECK ALL THAT APPLY.			Response Percent	Response Count
Poorly defined implementation/project plan			19.0%	27
Poorly defined roles/responsibilities			21.8%	31
Unrealistic, unmanageable implementation scope			28.9%	41
Sponsors' focus, commitment becomes diverted during implementation			56.3%	80
Poor internal support available from key executives, groups, or critical stakeholders			46.5%	66
Insufficient training for ROI project team			30.3%	43
Insufficient resource allocation (people, money, materials, tools, technologies)			62.0%	88
Ineffective utilization of resources (people, money, materials, tools, technologies)			30.3%	43
NA - Have not observed or experienced any of these barriers			6.3%	9
No Opportunity to Observe			1.4%	2
If NA, please comment				5
			answered question	142
			skipped question	7

7. CAPACITY Please indicate which of the following represent the MOST FREQUENTLY occurring barriers to ROI process implementation, in your organization or your client organizations (on average). CHECK ALL THAT APPLY.			
		Response Percent	Response Count
Poor assessment of employees' readiness, energy, or motivation to support implementation demands		47.2%	67
Poor assessment of organizational readiness to meet new demands		52.1%	74
Insufficient performance support mechanisms (early training, job aids, coaching, on-the-job training) for ROI implementation		38.0%	54
No allowances made for performance declines during employees' preliminary learning curves and early skill development		38.7%	55
NA - Have not observed or experienced any of these barriers		10.6%	15
No Opportunity to Observe		3.5%	5
If NA, please comment			5
answered question			142
skipped question			7

8. CHANGE PROCESS Please indicate which of the following represent the MOST FREQUENTLY occurring barriers to ROI process implementation, in your organization or your client organizations (on average). CHECK ALL THAT APPLY.			
		Response Percent	Response Count
Competing, conflicting business priorities/demands detract from ROI implementation focus		70.1%	101
Limited perspective about change issues associated with ROI implementation (ie. employees' fear of how results data will be used, anxiety about increased accountability)		47.9%	69
Limited to no change leadership strategies applied to implementation effort		39.6%	57
Committed resources diverted during implementation due to competing demands		47.2%	68
Limited to no risk management or contingency planning (ie. for attrition of staff, changes in leadership, resource constraints, unexpected business demands)		31.9%	46
Episodic, sporadic, "waxing/waning" organizational support for ROI implementation		52.1%	75
NA - Have not observed or experienced any of these barriers		2.1%	3
No Opportunity to Observe		2.1%	3
If NA, please comment			4
answered question			144
skipped question			5

9. ORGANIZATIONAL CHANGE PATTERNS Please rate the extent with which each factor TYPICALLY occurs during a change effort of ANY kind (up to and including ROI implementation), in your organization or your client organization (average).							
	No Extent	Limited Extent	Moderate Extent	Significant Extent	Very Significant Extent	No Opportunity to Observe	Rating Average
Complex change projects require approval at multiple leadership or management levels	1.4% (2)	5.7% (8)	14.3% (20)	33.6% (47)	36.4% (51)	8.6% (12)	4.07
The business case for complex change projects is communicated effectively throughout the organization	5.0% (7)	30.0% (42)	32.1% (45)	20.7% (29)	5.7% (8)	6.4% (9)	2.92
Project leaders balance the time spent planning with time spent implementing	5.1% (7)	26.1% (36)	38.4% (53)	15.9% (22)	5.1% (7)	9.4% (13)	2.85
Leaders are sensitive to the effect of cumulative, overlapping changes upon employees' energy, motivation, or adaptability	7.2% (10)	33.3% (46)	31.2% (43)	19.6% (27)	2.9% (4)	5.8% (8)	2.76
Performance expectations, after the introduction of a change effort, are realistic	5.8% (8)	23.7% (33)	37.4% (52)	20.1% (28)	1.4% (2)	11.5% (16)	2.86
Leaders effectively prioritize overlapping change projects in order to eliminate less essential ones and improve change success	8.6% (12)	35.7% (50)	30.0% (42)	12.1% (17)	2.1% (3)	11.4% (16)	2.55
Management-created project teams fully understand and support changes they are asked to implement	5.0% (7)	25.0% (35)	33.6% (47)	26.4% (37)	2.1% (3)	7.9% (11)	2.95
Past change initiatives have successfully met strategic goals and achieved desired results	5.7% (8)	26.4% (37)	34.3% (48)	17.1% (24)	5.0% (7)	11.4% (16)	2.88
Failed change efforts are typically attributed to employee resistance	5.7% (8)	21.4% (30)	22.9% (32)	25.7% (36)	9.3% (13)	15.0% (21)	3.13
Internal controls are in place to ensure that resources (people, money, materials, tools, technologies) are properly utilized	6.4% (9)	32.9% (46)	34.3% (48)	13.6% (19)	2.9% (4)	10.0% (14)	2.71

during a major change effort							
Leaders stay on track throughout every phase of a complex change effort	4.3% (6)	32.9% (46)	32.1% (45)	17.9% (25)	3.6% (5)	9.3% (13)	2.82
Leaders assess the overall impact (ie. upstream, downstream) to the organization before going forward with a complex change	5.7% (8)	33.6% (47)	27.1% (38)	17.9% (25)	5.7% (8)	10.0% (14)	2.83
Comments							
	answered question						
	skipped question						

10. Number of years experience utilizing the ROI Methodology™, by you and your organization(s), respectively.						
	Less than 1 year	1-3 years	4-6 years	7 years or more	No Opportunity to Observe	Response Count
You	17.1% (22)	48.1% (62)	18.6% (24)	14.7% (19)	1.6% (2)	129
Your Organization (if you are internal)	18.9% (21)	41.4% (46)	12.6% (14)	10.8% (12)	16.2% (18)	111
Your Client Organizations (on average, for externals)	20.4% (19)	19.4% (18)	12.9% (12)	5.4% (5)	41.9% (39)	93
If Less Than 1 Year, please explain						24
	answered question					134
	skipped question					15

11. Number of impact studies conducted ANNUALLY by you and/or your organization(s) using the ROI Methodology™.						
	None	1-3	4-6	7 or more	No Opportunity to Observe	Response Count
You	15.6% (20)	63.3% (81)	10.9% (14)	5.5% (7)	4.7% (6)	128
Your Organization (if you are internal)	17.5% (20)	44.7% (51)	13.2% (15)	8.8% (10)	15.8% (18)	114
Your Client Organizations (on average, for externals)	17.2% (16)	31.2% (29)	6.5% (6)	2.2% (2)	43.0% (40)	93
If None, please explain						12
answered question						133
skipped question						16

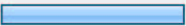
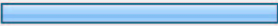
12. Approximately what percentage of training, HRD, performance improvement, or meetings/events staff have defined roles with evaluation activity, in your organization or your client organizations (on average)?								
	None	1-19%	20-39%	40-59%	60-79%	80-100%	No Opportunity to Observe	Response Count
Select one.	6.0% (8)	43.6% (58)	16.5% (22)	9.8% (13)	9.8% (13)	7.5% (10)	6.8% (9)	133
	answered question							133
	skipped question							16

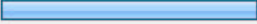
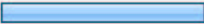
16. Approximately what percentage of training, HRD, performance improvement, or meetings/events results are tracked with a publicized "scorecard" approach, in your organization or your client organizations (on average)?								
	None	1-19%	20-39%	40-59%	60-79%	80-100%	No Opportunity to Observe	Response Count
Select one.	22.4% (30)	26.1% (35)	11.9% (16)	8.2% (11)	9.7% (13)	13.4% (18)	8.2% (11)	134
	answered question							134
	skipped question							15

17. Approximately what percentage of data generated from use of the ROI Methodology™ is applied towards program, policy, or process improvement in your organization, or your client organizations (on average)?								
	None	1-19%	20-39%	40-59%	60-79%	80-100%	No Opportunity to Observe	Response Count
Select one.	9.2% (12)	31.3% (41)	14.5% (19)	14.5% (19)	6.1% (8)	12.2% (16)	12.2% (16)	131
	answered question							131
	skipped question							18

18. Approximately what percentage of the total training, HRD, performance improvement, or meetings/events budget is applied towards evaluation, in your organization or your client organizations (on average)?								
	None	1-19%	20-39%	40-59%	60-79%	80-100%	No Opportunity to Observe	Response Count
Select one.	12.8% (17)	54.1% (72)	8.3% (11)	3.8% (5)	3.8% (5)	3.8% (5)	13.5% (18)	133
	answered question							133
	skipped question							16

19. PERCEIVED VALUE Please rate the extent to which data generated from the ROI Methodology™ adds OVERALL VALUE of the following components, of your organization or your client organizations (on average):							
	No Extent	Limited Extent	Moderate Extent	Significant Extent	Very Significant Extent	No Opportunity to Observe	Rating Average
Credibility of the training, HRD, performance improvement, or meetings/events function	3.1% (4)	16.2% (21)	28.5% (37)	30.8% (40)	18.5% (24)	3.1% (4)	3.47
Alignment of training, HRD, performance improvement, or meetings/events solutions to strategic business needs	4.7% (6)	16.3% (21)	26.4% (34)	30.2% (39)	18.6% (24)	3.9% (5)	3.44
Efficiency of solution design, development, and/or delivery	4.6% (6)	17.7% (23)	26.2% (34)	29.2% (38)	16.2% (21)	6.2% (8)	3.37
Effectiveness of solution design, development, and/or delivery	5.4% (7)	14.6% (19)	23.1% (30)	33.8% (44)	17.7% (23)	5.4% (7)	3.46
Quality of solution design, development, and/or delivery	3.1% (4)	15.4% (20)	24.6% (32)	34.6% (45)	17.7% (23)	4.6% (6)	3.51
Increased support from key stakeholders or decision makers	5.4% (7)	21.7% (28)	29.5% (38)	27.1% (35)	12.4% (16)	3.9% (5)	3.20
Policy decisions about performance practices, resources, and/or reward structures	12.3% (16)	30.0% (39)	25.4% (33)	16.2% (21)	6.9% (9)	9.2% (12)	2.75
Processes used to track employee, or employee group, performance	13.8% (18)	29.2% (38)	23.1% (30)	16.9% (22)	11.5% (15)	5.4% (7)	2.82
Processes used to track organizational performance	10.8% (14)	26.9% (35)	23.8% (31)	21.5% (28)	9.2% (12)	7.7% (10)	2.91
Institutional knowledge-sharing based on lessons learned from results data	10.0% (13)	28.5% (37)	24.6% (32)	17.7% (23)	10.0% (13)	9.2% (12)	2.88
Enhanced culture of accountability in the workplace	16.2% (21)	21.5% (28)	23.8% (31)	22.3% (29)	9.2% (12)	6.9% (9)	2.86
Other (please specify):							
	answered question						
	skipped question						

28. Have you earned ROI Methodology™ certification (ie. completed required project)?:			
		Response Percent	Response Count
Yes		39.5%	51
No		60.5%	78
Other relevant certifications, education (please specify)			30
answered question			129
skipped question			20

29. Your gender.			
		Response Percent	Response Count
Male		55.6%	74
Female		44.4%	59
answered question			133
skipped question			16

30. General comments regarding this survey, this research, or the topic of sustaining a comprehensive measurement and evaluation system:		
		Response Count
		33
answered question		33
skipped question		116

APPENDIX K

QUALITATIVE FINDINGS: STRUCTURED ACCOUNTS OF MAIN THEMES

Participant Code	Main Theme(s) or Combination of Themes	Significant Expression, Illustration, and Account
P1	Business Need + Partnering and Influencing	<p>[Our sponsor] came in as kind of a senior learning person... but without any HR or learning experience. Right after he landed in that role, we had finished all the re-engineering work and he was the one who said <i>'You know, I am just sitting here wondering, looking at all the money that we have spent and I am wondering what did we get for all this money – what really happened? Are people really doing anything any differently, or have people just gone back to their old habits or is anyone in fact doing something different than they would have if we hadn't spent all this money in training?'</i> He was a very senior level line of business leader who was making a career transition into Human resources.</p> <p>Driving this from the training and development side is a real concern over readiness...are our employees in the various roles that exist and business units that exist in the company, are they ready for the various integration efforts that are starting to unfold?</p> <p>They [learning staff] want to make it [results focus] a really systemic part of what they are doing now... with the end in mind of being credible...they have never really felt like a partner either to their HR counterpart or to their business unit counterpart. They really pretty much felt like just a pair of hands. So they really are seeking to be centre partners all the way around both with their HR counterpart manager and a lot of business leaders. I think this is what has driven them to this point, with the fundamental question being how do we know if people are ready for this huge, critical, high stake game of integrating the business of the two companies into one.</p> <p>If they did take the challenge and step up, then they could be seen as a strategic value added business partner ...really being focused on the business from learning and development perspective which would make us better business partners from an HR perspective. ... there were also other things that were happening in the company around efficiency and constant right sizing and downsizing.</p>

P2	Business Need + Continuing Education	<p>Value added...but more than anything, having a strategic approach to what it is that we are trying to accomplish. So from my point of view, given where the organization is at, it doesn't matter to me if it produces a positive ROI, it is about being thoughtful and strategic.</p> <p>It is definitely an education process where with every step along the way there is education, there is confusion to clear up. It is not something that you can communicate in one meeting and expect everybody to understand, as you know. So every little step of the way is another, not only in terms of implementation, but it is also a step in educating people along the way.</p> <p>Stakeholders...where they are at right now, they are open and they are still trying to understand the value, they are open and they are curious, but they don't yet see the value. This is not top-down, it's not like the senior executives decided to do this. This was something that I influenced in the middle of the organization and so I guess probably the biggest issue is around education and engagement of the many different people who have to play a role in any of the projects.</p>
P3	Business Need + Internal Support	<p>What is the worth or the value that I am getting out of my investment in this training organization or in learning altogether...it was left to me, I have to say I had a lot of flexibility and it was left to me to look for the best way to answer that question consistently and simply for the organization.</p> <p>There is a fear, there is a lack of understanding of ROI. You needed support from the folks that were directly impacted by the learning he program, the folks that wrote the program to help me write surveys, to help me understand what were the right questions to ask, because as you know in conducting a study if you're not asking the right questions, you get flawed data. As that process started and as the difficult questions were asked, people got nervous, and they thought if this doesn't return a positive ROI, is my program going to go away, am I going to be fired? So that fear led to barriers, it led to a lot of lack of support, in general lack of interest. It took, one particular program that comes to mind, the biggest barrier sadly was Human Resources department which made no sense to me because the Senior VP of human resources wanted all her programs to be studied in this capacity but then the person whom I needed to get directly involved in terms of give me the data elements and give me what I am supposed to be measuring, that person never got it and so it never got off the ground.</p>

		<p>Again, through her lack of understanding...what she kept saying it was too complex, and when we modified it and said we were not going to do all of these programs, but let's do a level 4 at least, let's do level 3 more consistently, she just had in her mind that it was too complicated, it took too long, it was this, it was that. She also started to feel she wanted answers by the end of the week, and that was not the type of process and this methodology was not going to be supported by a one week turn around, especially without the support of the individuals that I mentioned before and being the only advocate for it despite her assigning other senior managers in the University to help me support, to help support the effort, it just never got off the ground, I was really the only one advocating and truly the only one who understood the program, the methodology.</p>
P4	Business Need + Implementation and Integration + Readiness and Change Management	<p>We had an off-site and I was one of the organizers of the offsite and I built in a component about measurement and evaluation ...what do we need to do, why should we implement it, what is important about implementing it, and what do we need to do moving forward to make this happen because we were in a good place as an organization. Timing-wise we were ready to make that move and there was a lot of support with my peers and with the CLO as well, to do so.</p> <p>The learning organization was now at a place that the amount that had been spent on learning had been identified, they were becoming more strategic partners and trying to select more strategic learning initiatives to focus on that would really drive the business on, so it really made sense timing wise that o.k. if this is where we are far as our learning and our structure and being partners with the business it now makes sense timing wise to implement and connect to everything we are doing on measurement and evaluation process to ensure that these strategic learning initiatives we are taking on are really having the impact that we desired them to have. So it was really timing, it was the maturity of the learning organization.</p> <p>Now that we have enterprise standards and guidelines about how we're going to do this and we have done a pilot and we have got some best practices we are now rolling it out to each of the businesses ...I have now transferred my lead to my enterprise role around this to someone else who is really at the enterprise level and I am now responsible for taking it and implementing it locally in the business I support.</p>

P5	Sponsorship + Communicating for Impact	<p>Typically, when a new training officer comes on board they have been given marching orders about the budget and about efficiency and all those kinds of things...if that training director doesn't link to executives for sponsorship from the top, it [ROI process implementation] doesn't survive. I don't think is necessarily exclusive with ROI, I think it's true about any measurement, but ROI has such a high visibility, it makes it an easy target.</p> <p>I [don't]...lead off a conversation talking about ROI. I lead off the conversation talking about what people are doing in their work ...talking about business outcomes... You tend to have a better argument because what they are interested in is the result. The ROI is...one kind of value, but it isn't [usually] the ROI that they are going for, it is the result, the business outcome - it is whether people <i>'are doing what they should be doing.'</i></p>
P6	Business Need + Sponsorship	<p>What happened was that I noticed that the company was spending an awful lot of money on educational CD ROMS...like a quarter of a million dollars per CD ROM and when I went out to see how many people had actually looked at these CD ROMS. Out of a population of 5 or 6,000 people that could go out there and look at it, and then take a little quiz, and mark it on their e-learning course, we had numbers like 35 – 250 people out of thousands that were actually doing it. It was costing say 15 – \$20,000 per person to go out there and look at it, nobody was using it. I said there has got to be a more effective use of our money and that's when I was challenged to <i>'if you think there is a more effective way, prove it.'</i></p> <p>Advocacy early on was not good. I could not get support from senior management. They looked at this as a one year pilot...it was not until we... ended up with, I think, an ROI of 168% and multiple millions of dollars in additional sales ... when those results came out it was just like a flood at that point. That was probably about 5 months into it. Up until that time I was basically doing level 1's and 2's with an occasional behavioral change study. After that everybody wanted to measure everything... from that point forward I was probably working on anywhere from 75 – 100 level 1 – 3 and a few Level 4's and 5's (studies) at one time. It got to the point where it was almost unmanageable.</p> <p>They're looking at the ROI Methodology kind of backwards. They are looking at justifying money that has already been spent. They have spent millions of</p>

		<p>dollars on a program that anecdotally and qualitatively has been shown to be wildly successful, but nobody at this point has said, we have rolled this program out into 25 countries around the world and yet not one person has said <i>'Are we getting anything dollars and cents wise for this program?'</i> Now they are going backwards and saying <i>'Okay, how can we prove that we actually have been generating revenue, reducing costs or avoiding costs'</i>, so they are taking that kind of approach.</p>
P7	Sponsorship + Implementation and Integration + Readiness and Change Management	<p>It was all very forward thinking. We had a person in our organization at the time who was very proactive in looking at new emerging trends in our field and brought the methodology to our organization as a pilot. We identified several champions who would be interested in learning more about the methodology and applying it in their areas and implemented...in a limited scope.</p> <p>It was just at a time when there was a big push with quality movement going on. So this wasn't a far reach, it [results focus] just hadn't been applied to learning areas as much as the other business side.</p> <p>To answer your question about sponsorship, yes I would say that that has been important...It has been critical to identify a few key senior leaders who have had success and been on board to be supportive as the topic is introduced in different areas. In a sense we did continue to have the same champions, even though we are working at a different level now... we have sort of shifted from working with the individual projects in the field and those Directors ...or those training functions to now talking more about it [measurement] at the strategic level. At higher level committees and planning, we are almost under-billing the same implementation issues that we did at the beginning, it is just now at a much higher level.</p> <p>Over time, I think like any organization, trends shift and focuses shift as to what's important and what's new and emerging and what's good and bad, especially in the government where with every four years a new, sometimes eight, administration comes in, dramatically shifts our culture and our climate in our organization. The accountability arm swings the resources swing and so we see that quite often. In my 11 years working with this [ROI Methodology™] it has not been as dramatic. I would say if anything we have gotten more support over time in terms of the climate. I would say in terms of the methodology, there is always several camps over the years who have raised their head in defeat or wanting to hold up a different model or better and introduced new</p>

		<p>methodologies which have been introduced in our profession, so that has been normal. Overall, I would say though, that we've remained steady. The activity level for us in doing our allied studies has gone up and down slightly, but we have absolutely hung in there and remained to implement the process like we need to, but it definitely has met it's ups and downs with new and emerging things.</p> <p>We speak at conferences, we are seen as leaders and champions in this field. So those are the key things - championship, internal leadership... continued training and development of our staff and clients.</p>
P8 (Early Adopter)	Business Need + Sponsorship	<p>We wanted to show the value of the investment in time and money of this [customer service] program, so that really was what led us to begin to take a more formal approach [to evaluation].</p> <p>We're using this particular project as a pilot, for the methodology, although we don't refer to it in that manner. The processes and the program that we're using I believe could be rolled over into other areas, other organizations as well as they also approach their projects...how we...achieve improving performance.</p> <p>We have, in the last five years, been under the direction of a new CEO, and we have become more diverse. We have increased in I guess more modern business principles. In other words prior to his reign as CEO, we did not have a mission, vision statement, or corporate values. He implemented that. So with that new leadership we have also begun to be business plan oriented and therefore more goal-oriented.</p> <p>In the past project management hasn't always followed a defined process. Now that we have more of a defined [evaluation] process to follow, it makes for a more organized roll-out and...opportunities for communication...and sponsoring... measurement, etc. So I think this is one of the first opportunities to really follow a defined process.</p>
P9	Business Need + Implementation and Integration	<p>[Executives] didn't know the training organization was interested in business measures...now they [training] are at the table...using results for practical, strategic [purposes].</p> <p>[Barriers to sustainability} incompatible technology, turnover [leadership], resistance to 'new ways', bottom up vs. bottom down [sponsorship].</p>

P10	Business Need + Implementation and Integration	<p>We built our whole evaluation process, infrastructure...philosophy, standards, around the ROI Methodology™...in conjunction with the HPT model. It is interwoven in all the ways we do business.</p> <p>It [ROI process] must be built into a philosophy of accountability...evidence-based decision making...built into employee development...the way we develop people. Evaluation skill sets must be seen as a core competency...for demonstrating customer value and meeting customer-driven requirements.</p> <p>If it is not embedded in day-to-day business, it will not be sustained. [It is] doomed without champions to sustain it.</p>
P11	Business Need + Partnering and Influencing + Utility of Results Data	<p>[Business drivers] were focused on demonstrating outcomes from multiple perspectives...the patient, family, physician [hospital] experience, medical and quality of life outcomes, and value, the economic value of training and development...the ROI Methodology™ is [seen as] a sub-set of economic evaluation, utility analysis, understanding the costs and benefits of training...so that we can be more capable on delivery.</p> <p>Build credibility, get management buy-in with simple things first...by asking <i>‘what do I need to do to help people who need help?’</i> Give them something that’s usable.</p> <p>It’s [successful, sustainable implementation] 20% evaluation work, statistics, ROI application and 80% soft skills. It’s lots of conversation...client relationship building...understanding that the person in front of [you] is not necessarily the client. The real client may be the CEO.</p>
P12	Business Need + Sponsorship + Readiness and Change Management	<p>[Drivers for ROI process] how to best use our dollars and show the value that training and development was adding to the organization...how to best determine if individuals had the critical capabilities and skill sets...</p> <p>[We] started showing results that piqued their [decision makers] interest... pulling sponsors in versus pushing. It takes consistent awareness and communication of usable results...what does it mean to meet program or project objectives..was the initial needs assessment right?</p> <p>Change management is an important part [of sustainability]...a change process needs to be in place to appropriately introduce [the methodology] to individuals...to ensure the right structures are in place.</p>

REFERENCES

- Adams, J., Hayes, J., & Hopson, B. (1976). *Transitions: Understanding and managing personal change*. London: Martin Robertson.
- Allinger, G. & Tannenbaum, S. (1997). A meta-analysis of the relations among training criteria. *Personnel Psychology*, 50(2). 341-358.
- Amble, B. (2010, January). Good change management a key driver of success. *Management-Issues*. Retrieved January 7, 2010 from <http://www.management-issues.com/2010/1/26/research/good-change-management-a-key-driver-of-success.asp>
- Anderson, D, & Anderson L. (2001). *Beyond change management: Advanced strategies for today's transformational leaders*. San Francisco: Wiley.
- Appleby, H. & Tempest, S. (2006, October). Using change management theory to implement the international classification of functioning, disability, and health (ICF) in clinical practice. *British Journal of Occupational Therapy*, 69(10), 1-4.
- Armenakis, A.A., Harris, S. G., & Mossholder, K. W. (1993). Creating readiness for organizational change. *Human Relations*, 46, 681-703.
- ASTD 2004 Competency Study. (2004). *Mapping the future*. Alexandria, VA: ASTD.
- Bamberger, M., Rugh, J., & Mabry, L. (2006). *Real world evaluation: Working under budget, time and political constraints*. Thousand Oaks, CA: Sage.
- Bates, R. (2004). Critical analysis of evaluation practice: The Kirkpatrick model and the principle of beneficence. *Evaluation and Program Planning*, 27, 341-347
- Becker, Gary. (1994). *Human Capital: A theoretical and empirical analysis, with special reference to education*. Chicago: University of Chicago Press.

- Bedeian, A. (2004). In D. Buchanan & A. Huczynsk (Eds.) *Organizational behavior* (5th ed). Upper Saddle River, NJ: Prentice Hall.
- Bell, S. & Morse, S. (2001). Breaking through the glass ceiling: Who really cares about sustainability indicators? *Local Environment*, 6(3). 291-309.
- BHP Billiton (2004). *Working for a sustainable future. BHP Billiton health, safety, environment, and community report 2004*. Retrieved March 14, 2010 from <http://hsecreport.bhpbilliton.com/2004/repository/feedback/downloads.asp>
- Biech, E. (2007). *Thriving through change*. Alexandria, VA: ASTD Press.
- Bledsoe, M. (1999). *Correlations in Kirkpatrick's Training Evaluation Model*. Unpublished doctoral dissertation, Department of Curriculum and Instruction of the College of Education, University of Cincinnati.
- Bourque, L.B., & Fielder, E.P. (2003). *How to conduct self-administered and mail surveys*. (2nd ed). Newbury Park, CA: Sage.
- Bridges, W. (1991). *Managing transitions*. Reading, MA: Perseus.
- Broad, M. L. (2008). *Beyond transfer of training: Engaging systems to improve performance*. San Francisco, CA: John Wiley & Sons.
- Broad, M. L., & Burkett, H. (2007, April). *Pushing the performance perspective: A 5 step program for underperforming organizations*. Concurrent Session #1030, 2007 ISPI International Conference, San Francisco, CA.
- Bullock, R.J. & Batten, D. (1985, December). It's just a phase we're going through. *Group and Organization Studies*, 10, 383-412.
- Burke, W.W. (1994) *Organization Development* (2nd ed.). Indianapolis, IN: Addison-Wesley.

- Burkett, H. (1999). Measuring a train-the-trainer approach to support build-to-order capabilities. In J. Phillips & T. Hodges (Eds.), *In action: Measuring learning and performance* (pp. 27-47). Alexandria, VA: ASTD Press.
- Burkett, H., & Hall, P. (2003, August). *Take me to your leader: the value of sponsorship in managing evaluation projects. ASTD Links*. Alexandria, VA: American Society for Training and Development.
- Burkett, H. (2004, September). ROI as an emerging practice: a compilation of lessons learned from the field. *ASTD Links*. Alexandria: American Society for Training and Development.
- Burkett, H. (2005a). ROI on a shoestring - Measuring more with less. Part one. *Industrial & Commercial Training*. 37(1), 10-17.
- Burkett, H. (2005b). ROI on a shoestring –Strategies for resource constrained environments. Part two. *Industrial & Commercial Training*. 37(2), 97-105.
- Burkett, H. (2007, May). Maintaining momentum: Keeping ROI and results-based training efforts on track. *ASTD Links*. Alexandria, VA: American Society for Training and Development.
- Burkett, H. (2008). Transition planning steps for building and sustaining a results-based learning focus. In Gargiulo, T., Pangarkar, A., & Kirkwood, T. (Eds.), *The trainer's portable mentor*. San Francisco: Pfeiffer.
- Callahan, K., & Kloby, K. (2009). *Moving towards outcome-oriented performance measurement systems*. Washington, DC: The IBM Center for the Business of Government.
- Cameron, E., & Green, M. (2004). *Making sense of change management: A complete*

guide to the models, tools, & techniques of organizational change. London: Kogan Page.

Carleton, J. R., & Stevens, A. (2004). When worlds collide: The need for cultural assessment and integration. *Performance Improvement*, 43(6), 38-43.

Carnall, C.A. (1990). *Managing change in organizations*. London: Prentice Hall.

Carter, L., Ulrich, D., and Goldsmith, M. (2004). *Best practices in leadership development and organization change: How the best companies ensure meaningful change and sustainable leadership*. San Francisco, CA: Pfeiffer.

Casio, W.F. (2000). *Costing human resources: The financial impact of behavior in organizations*. (4th ed). Cincinnati, OH: Southwestern.

Castelli, E. (2008, May 18). How does your program measure up? *Federal Times.com*
Retrieved May 22, 2009 from <http://federaltimes.com/index.php?S=4092610>

Chakravorty, S. S. (2010, January 22). Where process improvement projects go wrong. *MIT Sloan Management Review*. Retrieved April 12, 2010 from
<http://sloanreview.mit.edu/executive-adviser/articles/2010/1/5214/where-process-improvement-projects-go-wrong/>

Cloete, F. (2005). *Towards a monitoring and evaluation system for sustainable development in South Africa*. Stellenbosch School of Public Management and Planning, University of Stellenbosch.

Colorado Trust (2006). *Organizational Capacity Assessment*. Retrieved January 22, 2010 from <http://www.coloradotrust.org/evaluation/sharing-knowledge/special-topics>

Cox, T. (2001). *Creating the multi-cultural organization: A strategy for capturing the*

- power of diversity*. San Francisco: Jossey-Bass.
- Crabtree, B. & Miller, W. (1999). (Eds.) *Doing qualitative research* (2nd ed). London: Sage.
- Creswell, J. W. (2003). *Research design. qualitative, quantitative, and mixed methods approaches*. (2nd ed). Thousand Oaks, CA: Sage.
- Creswell, J. W., & Plano Clark, V. L. (2007). *Designing and conducting mixed methods research*. Thousand Oaks, CA: Sage.
- Crosby, P. (1979). *Quality is free*. New York: McGraw-Hill.
- Cutt, J. & Murray, V. (2000). *Accountability and effectiveness evaluation in non-profit organizations*. New York: Routledge.
- Daft, R.L. (1992). *Organizational theory and design*. St. Paul, Minnesota: West.
- Denzin, N.K. & Lincoln, Y.S. (Eds.) (2000). *The handbook of qualitative research*. (2nd ed.). Thousand Oaks, CA: Sage.
- Dessinger, J.C, & Moseley, J. L. (2004). *Confirmative evaluation: Practical strategies for valuing continuous improvement*. San Francisco: Jossey-Bass/Pfeiffer.
- Dessinger, J.C, & Moseley, J. L. (2006). The full scoop on full scope evaluation. In J. A. Pershing (Ed.), *The handbook of human performance technology: A guide to improving people, process, and performance*. (3rd ed.; pp. 312-330). San Francisco: Pfeiffer.
- Dillman, D. A. (2000). *Mail and internet surveys: The tailored design method*. New York: John Wiley & Sons.
- Dow Jones Sustainability Indexes. (2006). Retrieved July 27, 2009, from http://www.sustainability-index.com/07_html/assessment/criteria.html

- Edwards, L. & Lounsberry, C. (2008). Measuring ROI in coaching for new employee retention. A global media company. In P. Phillips & J. Phillips (Eds), *ROI In Action Casebook* (pp. 155-169). San Francisco: Pfeiffer.
- Epstein, J. (2008). *Making sustainability work*. Sheffield, UK: Greenleaf.
- Epstein, J. & Roy, M.J. (2003). Improving sustainability performance: Specifying, implementing, and measuring key principles. *Journal of General Management* 29(1), 15-31.
- Fink, A. (2003). *How to manage, analyze, and interpret survey data*. (2nd ed). Thousand Oaks, CA: Sage.
- Fitz-enz, J. (2000). *The ROI of human capital*. New York: Amacom.
- Fitz-enz, J. & Bontis, N. (2002). Intellectual capital ROI: A causal map of human capital antecedents and consequents. *Journal of Intellectual Capital*. 3(3). 223-247.
- French, W. & Bell, S. (1995). *Organization development, behavioral science interventions for Organizational Improvement* (5th ed). Englewood Cliffs, NJ: Prentice-Hall.
- Fuller, J. (1997). *Managing performance improvement projects: Preparing, planning, implementing*. San Francisco: Pfeiffer.
- Gayeski, D. M. (1995). Changing roles and professional challenges for human performance technology. *Performance Improvement Quarterly*, 8(2), 7-39.
- Glaser, B., & Strauss, A. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Chicago: Aldine.
- Goodwyn, L. (1996). The nurse's role as change agent in the audit cycle. *Nursing standard*, 10(22), 43-46.

- Greiner, L. (1972). Evolution and revolution as organizations grow. *Harvard Business Review* 50(4), 37-46.
- Grove, A. (2006). *Only the paranoid survive*. New York: Doubleday Business.
- Hailey, V.H., & Balogun, J. (2002). Devising context sensitive approaches to change: The example of Glaxo Wellcome. *Long Range Planning*, 35(2), 153-79.
- Hale, J. (2002). *Performance-based evaluation*. San Francisco: Jossey-Bass/Pfeiffer.
- Hale, J. (2009, July). *7 tips for sustainable results*. Proceedings from ISPI On-Line Skills Program. Silver Spring, MD: ISPI.
- Hammonds, K. (2005, August). Why we hate HR. *Fast Company*. Retrieved December 22, 2009 from http://www.fastcompany.com/magazine/97/open_hr.html
- Harmon, P. (2004). *Business process change: A manager's guide to improving, Redesigning, Automating, Processes*. Amsterdam; Boston: Moran Kaufmann.
- Hart, C. (1998). *Doing a literature review*. Thousand Oaks, CA: Sage.
- Hatcher, L. (1994). *A step-by-step approach to using the SAS(R) system for factor analysis and structural equation modeling*. Cary, NC: SAS Institute.
- Henriques, A. (2004). CSR, sustainability, and the triple bottom line. In A. Henrques & J. Richardson (Eds), *The triple bottom line. Does it all add up?* (26-33). London: Earthscan.
- Herold, D. M., Fedor, D. F., & Caldwell, S. D. (2007). Beyond change management: A multi-level investigation of contextual and personal influences on employees' commitment to change. *Journal of Applied Psychology*. 92, 942-951.
- Herold, D. & Fedor, D. (2008). *Change the way you lead change*. Stanford, CA: Stanford University Press.

- Hiatt, J., & Creasy, T. (2003). *Change management: The people side of change*. Loveland, Co: Prosci Research.
- Hill, D. R. (1999). *Evaluation of formal, employer-sponsored training in the U.S. healthcare industry*. Unpublished doctoral dissertation, The University of Texas, Austin, Human Resources Development.
- Hodges, T. K. (2002). *Linking learning and performance*. Boston: Butterworth-Heinemann.
- Holton, E. F., III. (1996). The flawed four level evaluation model. *Human Resource Development Quarterly*, 7(1), 5–21.
- Holton, E. F., & Swanson, R. A. (2006) *Results: How to assess performance, learning, and perceptions in organizations*. Beijing: Renmin University Press.
- Huglin, L., Johnsen, L., & Marker, A. (2007). Research priorities in performance technology: A Delphi study. *Performance Improvement Quarterly*, 20(1), 79-96.
- Huselid, M., Jackson, S.E., & Schuler, R. S. (1997). Technical and strategic human resource management effectiveness as determinants of firm performance. *Academy of Management Journal*, 1(40), 171-188.
- Hyde, C.A. (2003). Multicultural organizational development in nonprofit human service agencies: views from the field. *Journal of Community Practice*, 11(1), 39-59.
- International Institute for Sustainability Development (IISD). *Complete Bellagio principles*. Retrieved April 10, 2010 from http://www.iisd.org/measure/principles/progress/bellagio_full.asp
- Isaksson, R. & Hallencreutz, J. (2008). The measurement system resource as support for sustainable change. *The International Journal of Knowledge, Culture, and*

- Change Management*, 8(1). 265-274.
- Jaffe, D., & Scott, C. (1999). *Getting your organization to change*. San Francisco: Changeworks, Inc.
- Kaplan, R.S. & Norton, D.P. (1996). *Translate strategy into action – The balanced scorecard*. Boston: Harvard Business School Press.
- Kaufman, R. & Keller, J.M. (1994, Winter). Levels of evaluation: Beyond Kirkpatrick. *HRD Quarterly*, 5(4)., 371-380.
- Kearsley, G. (1982). *Costs, benefits, & productivity in training systems*. Reading, MA: Addison-Wesley.
- Kirkpatrick, D. L. (1975). Techniques for evaluating training programs. In D. L. Kirkpatrick (Ed.), *Evaluating training programs* (pp. 1-17). Madison, WI: ASTD.
- Kirkpatrick, D. L. (1998). *Evaluating training programs* (2nd ed). San Francisco: Berrett-Koehler.
- Klein, J. (2008, Oct). Empirical research on performance improvement. *Performance Improvement Quarterly*, 15(1). 99-110.
- Kotter, J.P. (1996). *Leading Change*. Boston: Harvard Business School Press.
- Kusek, J.Z., & Rist, R.C. (2004). *Ten steps to a results-based monitoring and evaluation system: A handbook for development practitioners*. Washington, DC: The World Bank.
- Langdon, D.G. (1992). Human performance technology in action: Application examples. In H.D. Stolovitch & E. J. Keeps (Eds.) *Handbook of human performance technology*. San Francisco: Jossey-Bass.
- Lee, J., Lee, D., & Sungwon, K. (2009). vPMM: A value based process maturity model.

Heidelberg: Springer Berlin.

Lewin Group. (2002). *Indicators of cultural competence in health care delivery organizations: An organizational cultural competence assessment profile*.

Rockville, MD: U.S. Department of Health and Human Services, Health Resources and Services Administration.

Lewin, K. (1951). *Field theory and social science*. New York: Harper and Row.

Lincoln, Y.S. & Guba, E.G. (2000). Paradigmatic controversies, contradictions, and emerging confluences. In N.K. Denzin & Y.Lincoln (Eds.), *Handbook of qualitative research*. (2nd ed. pp. 163-188). Thousand Oaks, CA: Sage.

Litwin, M.S. (2003). *How to assess and interpret survey psychometrics*. (2nd ed). Thousand Oaks, CA: Sage.

Mayeno, L. (2007, July). *Multicultural organizational development, A resource for health equity. Organizational development & capacity in cultural competence: building knowledge and practice*. San Francisco: CompassPoint Nonprofit Services.

Merriam, S.B. (1998). *Qualitative research and case study applications in education*. San Francisco: Jossey-Bass.

Metzenbaum, S. (2008, Spring). Performance management recommendations for the new administration. *The Business of Government*. Washington, DC: The IBM Center for the Business of Government. 74-77.

Meyer, B. (1995). *Object success*. Upper Saddle River, NJ: Prentice Hall.

Michalski, J.V., & Cousins, J.B. (2001, February). Multiple perspectives on training evaluation: Probing stakeholder perceptions in a global telecommunications

- network. *American Journal of Evaluation*, 22(1), 37-48.
- Miller, V. A. (1996). The history of training. In R. L. Craig (Ed), *The ASTD training and development handbook* (pp. 31-18). New York: McGraw-Hill.
- Minkler, M. & Wallerstein, N. (Eds.) (2003). *Community based participatory research for health*. San Francisco: Jossey-Bass.
- Moseley, J. L., & Dessinger, J. C. (1998). The Dessinger-Moseley evaluation model: A comprehensive approach to training evaluation. In P. J. Dean & D.E. Ripley (Eds.), *Performance improvement interventions: Instructional design and training--Methods for organizational learning*. Alexandria, VA: International Society for Performance Improvement.
- Moss, H. K. (2007, March). Improving service quality with the theory of constraints. *Journal of Academy of Business and Economics*. Farmington Hills, Michigan: HighBeam™ Research.
- Mourier, P., & Smith, M. (2001). *Conquering organizational change*. Atlanta, GA: CEP Press.
- Moynihan, T. (1997, May). How experienced project managers assess risk. *IEEE Software*, 14(3), 35-41.
- Nadler, L., & Nadler, Z. (1994). *Designing training programs* (2nd ed). Boston: Butterworth-Heinemann.
- Nadler, D. A., & Tushman, M. L. (1997) *Competing by design: The power of organizational architecture*. New York: Oxford University Press.
- Noer, D. (1993). *Healing the Wounds: Overcoming the trauma of layoffs and revitalizing downsized organizations*. San Francisco: Jossey-Bass

- Nunnally, J. (1978). *Psychometric theory*. New York: McGraw-Hill.
- O’Cathain, A., Murphy, E., & Nicholl, J. (2008, April). The quality of mixed methods studies in health services research. *Journal of Health Services Research Policy*. London: The Royal Society of Medicine Press.
- O’Neill, M. (2000). *Executive coaching with backbone and heart*. San Francisco: Jossey-Bass.
- Oseko, K., & Tetsuichi, A. (1990). *Handbook of quality tools*. Portland, OR: Productivity Press.
- Patton, M. Q. (2002). *Qualitative research and evaluation methods* (3rd ed.). Thousand Oaks: Sage.
- Pershing J. A., Cheng J., & Foong, K. P. (2006, August). International Society for Performance Improvement professional practices survey: a report. *Performance Improvement*, 45(7). 39-47. San Francisco: CA; Wiley.
- Pershing, J. A., Lee, J., & Cheng, J. (2008). Current status, future trends, and issues in human performance technology, part 1. *Performance Improvement*, 47(1), 9-17.
- Phillips, J. J. (1995, Summer) Corporate training: does it pay off? *William and Mary Business Review*, 6-10.
- Phillips, J. J. (1996, February). ROI: The search for best practices. *Training and Development*, 50(2), 42-47.
- Phillips, J. J. (1997a). *Handbook of training and evaluation and measurement methods* (3rd ed). Houston: Gulf Publishing.
- Phillips, J. J. (1997b). *Return on investment in training and performance improvement programs*. Houston: Gulf Publishing.

Phillips, J. J. (Ed). (1998). *In action: Implementing evaluation systems and processes*.

Alexandria, VA: American Society for Training and Development.

Phillips, J.J., & Stone, R.D. (2002). *How to measure training results: A practical guide to tracking the six key indicators*. New York: McGraw-Hill.

Phillips, J.J. (2003, December) Human capital measurement: A challenge for the CLO.

Chief Learning Officer. Retrieved February 21, 2009 from

http://www.clomedia.com/content/templates/clo_fairfield.asp?articleid=311&zonedid=11

Phillips, P. (2003, August). *Training evaluation in the public sector*. Hattiesburg, MS:

University of Southern Mississippi.

Phillips, J.J., & Schmidt, L. (2004). *The leadership scorecard*. St. Louis:

Elsevier/Butterworth-Heinemann.

Phillips, J.J. (2005). *Investing in your company's human capital*. New York: AMACOM.

Phillips, J.J., Phillips, P., Stone, R., & Burkett, H. (2006). *The ROI fieldbook: Strategies*

for implementing ROI in HR and training. St. Louis: Elsevier/Butterworth-

Heinemann.

Phillips, J.J., & Ekeles, T. (2007). *The chief learning officer: Driving value within a*

changing organization through learning and development. Boston: Butterworth-

Heinemann.

Phillips, P., & Phillips, J. (2007a). *The value of learning: How organizations capture*

value and ROI. San Francisco: Pfeiffer.

Phillips, P. P., & Phillips, J. J. (2007b, October). Show me the money: The use of ROI

in performance improvement, part 1. *Performance Improvement*, 46(9), 8-22.

- Phillips, J. J., & Aaron, B. (2008). *Isolation of results. Defining the impact of the program*. San Francisco: Pfeiffer.
- Phillips, J. J., & Phillips, P. P. (2008). *Beyond learning objectives*. Alexandria, VA: ASTD Press.
- Phillips, J.J. & Tush, W.F. (2008). *Communication and implementation, sustaining the practice*. San Francisco: Pfeiffer.
- Phillips, P. P., & Phillips, J. J. (2010). *Measuring for success: What CEO's really think about learning investments*. Alexandria, VA: ASTD Press.
- Porras, J. (1987). *Stream analysis: A powerful way to diagnose and manage organizational change*. Upper Saddle River, NJ: Pearson Education.
- Power, B. (2007). *Michael Hammer's process and enterprise maturity model*. Retrieved April 4, 2010 from http://docs.google.com/viewer?a=v&q=cache:93IILvIDp-sJ:www.bptrends.com/deliver_file.cfm%3FfileType%3Dpublication%26fileName%3D07-07-ART-HammersPEMM-Power-final1.pdf
- Preskill, H., & Russ-Eft, D. (2005). *Building evaluation capacity*. Thousand Oaks, CA: Sage.
- Prochaska, J.O., Redding, C.A., & Evers, K. E. (1997). A transtheoretical model and stages of change. In K. Glanz, F.M. Lewis, B.K, Rimer (Ed.) *Health behavior and health education: Theory research and practice* (2nd ed., pp. 60-84). San Francisco: Jossey-Bass.
- Prochaska, J.O., Prochaska, J.M., & Levesque (2001). A transtheoretical approach to changing organizations. *Administration and Policy in Mental Health*, 28(4), 247-261.

- Robinson, D.G., & Robinson, J. C. (2005). *Strategic business partner: Aligning people strategies with business goals*. San Francisco: Berrett-Koehler.
- Rossi, P.H., Freeman, H., & Lipsey, M. W. (1999). *Evaluation: A systematic approach* (6th ed). Thousand Oaks, CA: Sage.
- Rouiller, J. Z., & Goldstein, I. L. (1993). The relationship between organizational transfer climate and positive transfer of training. *Human Resource Development Quarterly*, 4(4), 377–390.
- Rummler, G. & Brache, A. (1995). *Improving performance: How to manage the white space on the organization chart*. San Francisco: Jossey-Bass.
- Russ-Eft, D., & Preskill. H. (2001). *Evaluation in organizations: A systematic approach to enhancing learning, performance, and change*. Cambridge, MA: Perseus.
- Salton, G. (2007, January). Human Resources VP's 'Seat at the Table'. *Organizational engineering evidence-based research into human behavior in group contexts*. Retrieved September 22, 2009 from http://garysalton.blogspot.com/2007/01/human-resources-vps-seat-at-table_21.html
- Savitz, A., & Weber, K. (2006). *The triple bottom line*. San Francisco: John Wiley & Sons.
- Schein, E. (1990). *Organizational culture and leadership* (2nd ed). San Francisco: Jossey-Bass.
- Scriven, M. (1991). *Evaluation Thesaurus* (4th ed). Thousand Oaks, CA: Sage.
- Senge, P., Kleiner, A., Roberts, C., Ross, R., Roth, G., & Smith, B. (1999). *The dance of*

- change*. London: Nicholas Brealey.
- Sekaran, U. (1992). *Research methods for business: A skill building approach* (4th ed). San Francisco: Wiley.
- Simonson, P. (1997). *Promoting a development culture in your organization: Using career development as a change agent*. Palo Alto, CA: Davies-Black.
- Skinner, W. (1981, September). Big hat, no cattle: Managing human resources. *Harvard Business Review*. Retrieved September 22, 2009 from <http://harvardbusiness.org/product/big-hat-no-cattle-managing-human-resources/an/81512-PDF-ENG>
- Smith, S. (2008). Why follow levels when you can build bridges? *T & D*. 62(9). 58-62.
- Sobkowiak, R. T., & LeBleu R.E. (1996). Repositioning HR information systems - empowering employees through information. *Information Systems Management*, 13(1) 62-64.
- Spitzer, D. & Conway, M. (2002) *Link training to your bottom line*. Alexandria, VA: ASTD.
- Stamp, P., Sisto, M., Sabitus, R., Burt, C., Rava, R., Muth, W., Hall, S., & Onofre, B. (1998). The role of ROI in a high performance learning organization. In J. Phillips (Ed), *Implementing Evaluation Systems and Processes* (pp. 55-79). Alexandria, VA: ATD Press.
- Stewart, T. (1996, January). Taking on the last bureaucracy: People need people but do they need personnel? It's time for human resource departments to put up or shut up. *Fortune*. Retrieved January 30, 2010 from http://money.cnn.com/magazines/fortune/fortune_archive/1996/01/15/207172/ind

ex.htm

- Strauss, A. & Corbin, J. (1998). *Basics of qualitative research techniques and procedures for developing grounded theory* (2nd ed). London: Sage.
- Stufflebeam, D. (1983). The CIPP model for program evaluation. In G. Madeus, M. Scriven & D. Stufflebeam (Eds.), *Evaluation Models: Viewpoints on Educational and Human Service Evaluation* (pp. 117-142). Boston: Kluwer Nijhof.
- Swanson, R. A. & Holton, E. F. (2009). *Foundations of human resource development* (2nd ed). San Francisco: Berrett-Koehler.
- Tashakkori, A. & Creswell, J., (2007). Exploring the nature of research questions in mixed methods research. *Journal of mixed methods research*, 1(4), 303-308.
- Taub, 2003, S. (2003, February). CFOs want more HR input, survey shows. *CFO*. Retrieved February 22, 2010 from <http://www.cfo.com/article.cfm/3008382?f=singlepage>
- Tesoro, F. (1998). Implementing an ROI measurement process at Dell computer. *Performance Improvement Quarterly*, 11(4), 103–114.
- Thibault, J. W., & Kelley, H. H. (1952). *The social psychology of groups*. New York: John Wiley & Sons.
- Torraco, R. J. & Swanson, R. A. (1997). The strategic roles of human resource development. *Human Resource Planning*, 18(4), 11-21.
- Tuckman, B. (1965). Development sequences in small groups. *Psychological Bulletin*. 63, 384-99.
- Ulrich, D. (1997). *Human resource champions: The next agenda for adding value and delivering results*. Boston: Harvard Business School Press.

- Ulrich, D. & Brockbank, W. (2005). *The HR value proposition*. Boston: Harvard Business School of Publishing.
- Van Buren, M. (2001). *State of the Industry Report 2001*. American Society for Training and Development. Alexandria, VA: ASTD (51).
- Vosburgh, R. (2007, September). The evolution of HR: Developing HR as an internal consulting organization. *Entrepreneur*. Retrieved May 24, 2009 from <http://www.entrepreneur.com/tradejournals/article/169413773.html>
- Vaill, P. (1985). Integrating the diverse directions of the behavioral sciences. In Tahnnebaum, Marguiles, Massarik and Associates (Eds.), *Human systems development*, p. 558. San Francisco: Jossey-Bass.
- Van Slyke, E. (2009, August). The structure required for adaptive change management. *IT Business Edge*. Retrieved December 30, 2009 from <http://www.itbusinessedge.com/cm/community/features/guestopinions/blog/the-structure-required-for-adaptive-change-management/?cs=35165>
- Van Slyke, D., & Johnson, J. (2006, June). Nonprofit organizational performance and resource development strategies. *Public Performance & Management Review*. 29(4) 467 – 496.
- Von Bertalanffy, L. (1995) *General system theory: Foundations, development, applications*. Malabar, FL: Krieger.
- Waagen, A. (1998) Task analysis. *Instructional Systems Development, An Info-Line Collection for Training and Development Professionals*. (Issue #9808), 56-72.
- Wall, D.S., McHale, J., & Pomeroy-Huff, M. (2005, December). Case study: Accelerating process improvement by integrating the TSP and CMMI. *Software*

- engineering institute special report*. Retrieved April 10, 2010 from <http://www.sei.cmu.edu/library/abstracts/reports/05sr012.cfm>
- Wallace, D. (2001). Partnering to achieve measurable business results in a new economy. In P. Phillips (Ed.), *In action. Measuring return on investment. Volume 3*. Alexandria, VA: American Society for Training and Development.
- Walters, J. & Thompson, C. (2005, July). *The transformation of the government accountability office: Using human capital to drive change*. Washington, DC: The IBM Center for the Business of Government.
- Warr, P. B. & Bunce, D. (1995). Trainee characteristics and the outcomes of open learning. *Personal Psychology*, 48, 347-375.
- Warr, P., Allan, C., & Birdi, K. (1999). Predicting three levels of training outcome. *Journal of Occupational and Organizational Psychology*, 72, 351-75.
- Weinberg, G. (1997). *Quality software management. Volume 4 anticipating change*. New York: Dorset House.
- Willmore, J. (2001). Trends and the profession. In L.L. Ukens (Ed.), *What smart trainers know*, (pp.14-21). San Francisco: Jossey-Bass/Pfieffer.
- Woolley, C. (2008, October). Meeting the mixed methods challenge of integration in a sociological study of structure and agency. *Journal of Mixed Methods Research*. 3(7), 7-25. Cambridge, UK: Sage.
- Worthen, B., Sanders, J., & Fitzpatrick, J. (2003). *Program evaluation: Alternative approaches and practical guidelines* (3rd ed). Columbus, OH: Allyn & Bacon.
- Yelon, S., Sheppard, L., Sleight, D., & Ford, J.K. (2004). Intention to transfer: How do autonomous professionals become motivated to use new ideas? *Performance*

Improvement Quarterly, 17(2), 82-103.

Yukl, H. (2002). *Leadership in organizations*. Delhi, India; Pearson Education.